Perkins

The University Record of the University of Florida

SUMMER SESSION 1957

VOL. LII Series 1, No. 3 March 1, 1957

Published monthly by the University of Florida, Gainesville, Florida. Entered in the post office in Gainesville, Florida, as second class matter, under Act of Congress, August 24, 1912. Office of Publication, Gainesville, Florida.

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The University Record Comprises:

The Reports of the President to the Board of Control, the Annual Catalog, the Schedules, the Bulletin of the Summer Session, and announcements of special courses of instruction.

These bulletins will be sent without charge to all persons who apply for them. The applicant should specifically state which bulletin or what information is desired. Address

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Summer Session 1957

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CALENDAR OF 1957 SUMMER SESSION

May 4, Monday	Last day for filing preliminary application for 1957 summer session.
June 13, Thursday	Placement Tests for entering students.
June 14, 15, 17, Friday Saturday, Monday	Registration according to appointments assigned on receipt of preliminary application.
June 18, Tuesday, 7 a.m.	Classes begin. All registration fees increased $5.00 for persons completing registration on or after this date.
June 19, Wednesday, 5 p.m.	Last time for completing registration for the summer session. No one will be permitted to start registration after 3 p.m. on this date. Last time for adding or changing sections.
June 21, Friday, 4 p.m.	Last time for submitting resignation for the summer session and receiving any refund of fees.
June 22, Saturday, 12 Noon	Last time for making application at the office of the Registrar for degree to be conferred at the end of the summer session.
July 4, Thursday	Holiday. Classes suspended.
July 6, Saturday, 12 Noon	Last time for graduate students to apply to Department of Foreign Languages for reading knowledge examination on July 21.
July 9, Tuesday, 4 p.m.	Last time for dropping courses without receiving a grade of E.
July 19, Friday	Last day for candidates for degrees to be conferred at end of the summer session to complete correspondence courses.
~~July 20, Saturday, 10-12 a.m.~~ July 29 - Last day for applying	~~Foreign language reading knowledge examination for graduate students, Room 18, Anderson Hall.~~
July 22, Monday, 4 p.m.	Last time for candidates for Master's and Doctor's degrees to be conferred at the end of the summer session to file theses with the Dean of the Graduate School.

August 3 Foreign Language reading knowledge examination

August 6, Tuesday, 7 a.m.	Final examination period begins. First semester registration begins for students enrolled in the summer session.
August 8, Thursday, 4 p.m.	Grades for all candidates for degrees to be conferred at the end of the summer session are due in the Office of the Registrar.
August 9, Friday	Faculty meetings, at times announced by the Deans, to pass upon candidates for degrees.
August 10, Saturday, 12 Noon	All grades for the summer session due in the Office of the Registrar.
August 10, Saturday, 8 p.m.	Summer Commencement Convocation.

ADMISSIONS

PRELIMINARY APPLICATION

All persons planning to attend the 1957 Summer Session, whether or not they have previously attended the University, must file the preliminary application form to be considered. The preliminary application may be obtained by writing to Office of the Registrar. No applicant can be assured that his admission to the 1957 Summer Session will be considered unless the preliminary application has been received at the Office of the Registrar on or before Monday, May 20, 1957. Upon receipt of the preliminary application, the applicant will be notified of the additional information (if any) that must be submitted. This additional information must be in the Office of the Registrar on or before June 1, 1957.

GENERAL STATEMENT

The Admission Requirements have been arrived at after a very careful study of the experiences of thousands of students over a long period of years. In every case they are minimum requirements that have evolved from studies of student performance at the University of Florida. These studies have had as a primary objective the identification of factors that would indicate a reasonable chance for successful completion of University work.

The Board of University Examiners is the agency responsible for administering all admissions to the University and its various components.

Students who are planning to enter the University of Florida for the first time will be considered for admission as follows:

Freshmen (those who have never attended any college)

1. If the student is entering the University from high school and has not attended college, he will be considered for admission to the University College. (See Section I)

Undergraduate Transfer Students

2. If the student is transferring to the University from another college or university and is presenting less than 64 semester hours of acceptable college credit for advanced standing, he will be considered for admission to the University College. (See Section II).

3. If the student is transferring to the University from another college or university and is presenting 64 semester hours or more of acceptable college credit as advanced standing toward a baccaulareate degree, he will be considered for admission to the Upper Division school or college of his choice providing his record indicates the completion of college work approximately equivalent to the comprehensive courses offered by the University of Florida in the areas of the Social Sciences, the Physical Sciences, English, the Humanities and the Biological Sciences. (See Section III)

Graduate Students (candidates for Master's or Doctor's Degrees)

4. If the student wishes to pursue graduate studies and has been graduated from an accredited college or university, he will be considered for admission to the Graduate Division. (See Section IV)

Medical Students (See Section V)

Law Students (See Section VI)

ADMISSION TO THE UNIVERSITY COLLEGE

Section I Freshman (Applicants who have never attended college)

A. Graduates of Florida High Schools:

1. Graduation from an accredited high school is required. No specific units are required but students expecting to apply for admission to the University are advised to emphasize in their high school programs the following subjects: English, social studies, mathematics, foreign languages and the natural sciences.

2. Minimum Standing on the Placement Tests of the Florida 12th Grade Testing Program. All applicants must take the placement tests before being admitted to the University. These are achievement tests in the fields of English, mathematics, social studies, and natural sciences. Attainments in these fields are possible without specific high school courses and are not guaranteed by the acquiring of certain high school units. Graduates of accredited Florida secondary schools who attain scores on the Florida State-Wide 12th Grade Testing Program tests which place them above the scores attained by the lowest 40% of the high school seniors of the state are academically eligible for admission. The University may re-test any applicant prior to admission to validate the scores attained in the State Program.

3. High school graduates who do not meet the above requirements may apply for special consideration. In each case the application will be considered on an individual basis, and any, or all, or any combination of the following types of evidence may be used in appraising the eligibility of the student for admission to the university: a personal interview, grades and rank in class, reference to the student's cumulative high school files, recommendation of the high school principal, and/or review of the results of tests already given or requested by the university admissions committee. After reviewing the evidence called for, the Board of University Examiners may grant or deny admission. In such cases the University will give considerable weight to results on such other tests as are recommended by the Board of Examiners.

4. Non-Florida students entering the University as first time freshmen must, in addition to meeting the requirements stated in 2, above, have graduated from an accredited high school with standing in the upper half of their graduating class. They must also present recommendations from the high school principal or school superintendent. Non-Florida applicants are urged to take the College Entrance Board Examinations, the results of which can be satisfactorily compared with the tests of the Florida Program so as to avoid the expense for coming to Gainesville to take the Florida Tests.

*Section II Transfer Students**

1. *Honorable Dismissal.* The student must be eligible to return to the institu-

*The student who has matriculated at any college or university, regardless of the amount of time spent in attendance or credit earned, is regarded as a transfer student.

tion last attended. Students who *for any reason* will not be allowed to return to the institution last attended cannot be considered for admission.

2. *Satisfactory record.* All transfer students must have made an average of C or higher on all work attempted at all institutions previously attended to be considered for admission.

3. Undergraduate transfer students shall be required to make a satisfactory score on a general ability test.

4. The University of Florida accepts on transfer only those courses completed at other institutions with grades of C or higher.

ADMISSION TO THE UPPER DIVISION

From the University College:

See elsewhere in this bulletin the various programs of the University College and the specific requirements listed under the curricula of the several colleges and schools.

Section III Transfer Students

1. *Honorable dismissal from the institutions previously attended.* An applicant for admission who for any reason is not eligible to return to the institution last attended cannot be considered for admission.

2. *An average of C or better.* The average grade for all work attempted at other institutions must be C or better. An average grade of C or better is required for graduation from the University of Florida, and one who has not maintained this average before coming to the University need not apply.

3. A minimum of 64 semester hours accepted as transfer credit (only those courses completed at other institutions with grades of C or higher) not more than four of which are in Military Science or Physical Education.

4. *Specific course requirements for the professional school of the applicant's choice.* The courses listed as required for admission to the Upper Division under the various curricula or acceptable substitutes must be offered as advanced standing to qualify the student for admission to the Upper Division. An applicant lacking some of these requirements may be permitted to enroll in the Upper Division and complete them without reducing the credits required in the Upper Division for a degree. In some cases the student may be required to enroll in the University College until these requirements are met.

5. Undergraduate transfer students shall be required to make a satisfactory score on a general ability test.

Section IV—ADMISSION TO THE GRADUATE DIVISION

(See also more detailed description in the section of the *Catalog* headed Graduate Division.)

Limitations of space and staff restrict the enrollment of graduate students. The records of applicants for graduate study are reviewed by the graduate selection committees of the various colleges and schools. In general no student will be considered for graduate study in any unit of the University who is a graduate of a non-accredited institution. Unqualified admission to the Graduate School for study toward all degrees except those in the College of Education and the College of Physical Education and Health is dependent upon presentation of an undergraduate record from an accredited college or curriculum with an average grade of "B" for the junior and senior years. All applicants are required to make a satisfactory score on the Graduate Record Examination before admission to the Graduate School can be granted.

Section V—ADMISSION TO THE COLLEGE OF MEDICINE

(Candidates for the M.D. degree are accepted for admission only in the Fall of each year. See also more detailed description in the section of the *Catalog* headed College of Medicine.)

Section VI—ADMISSION TO THE COLLEGE OF LAW

1. The beginning courses in Law are not offered in the Summer Session, hence students are not admitted in June unless they have completed satisfactorily at least one semester of work in an accredited law school.

2. A student wishing to transfer from another accredited law school who, at the time of beginning his study of law, qualified for admission to this College under the stated requirements for beginning students (other than the Law School Admission Test) and who has maintained a scholastic average of C or higher on all previous law school work undertaken, may apply for admission with advanced standing. Courses completed with a grade of C or higher in other accredited law schools will be accepted for credit up to but not exceeding a total of thirty hours.

3. Applicants for admission must have received before admission a 4-year baccalaureate degree from an accredited college or university, except in the case of veterans, who will be admitted after they have completed, in residence, three-fourths of a degree program (94 semester hours) in an accredited college or university if they have maintained a scholastic average of C or higher on all work undertaken.

Section VII
ADMISSION REQUIREMENTS FOR SPECIAL STUDENTS

Special students may be admitted to the various schools and colleges of the Upper Division only by approval of the Board of University Examiners. Each case will be considered on an individual basis. Application for admission as a special student must include: (1) records of previous educational experience (high school or college transcripts); (2) a statement as to the type of studies to be pursued; (3) a brief statement of the reason or reasons for selecting a special program other that a regular one; (4) satisfactory evidence of ability to pursue these studies—for example, a student to enroll as a special student for some technical courses and who feels qualified to do so by reason of employment or other experience should

submit a brief description of this experience. (5) Satisfactory scores on such ability or achievement tests as may be prescribed in individual cases by the Board of Examiners.

Section VIII
UNCLASSIFIED STUDENTS

For the summer session only, the University of Florida provides a category for those persons who may wish to take college courses and:

a. transfer back to the institution they regularly attend in the winter session;

b. meet certain specific certification requirements;

Persons from the groups defined above may enroll as unclassified students provided there is evidence that they would meet admission requirements as regular students.

It is possible, if the student later files all necessary credentials and meets all the requirements for registration as a regular student, for credit earned during one term as an unclassified student to be counted toward a degree program at the University of Florida. Under no circumstances will credit for more than one term in an unclassified status be applied toward any degree conferred by the University. Thus, persons that have been registered as unclassified in a previous summer session should complete the requirements for admission as regular students before attending subsequent summer sessions if they anticipate completing work for a degree at the University of Florida.

Students entering the University after high school graduation and prior to college attendance at any other institution are never admitted as unclassified students and must qualify for admission as regular students as described below.

ADMISSION INFORMATION FOR VETERANS

In addition to the regular requirements for admission set forth in the preceding sections and the forms incident thereto required by the University of Florida, any veteran who expects to enroll under provisions of any of the various federal laws governing education or rehabilitation training of veterans must be sure that he has cleared the necessary details with the Veterans Administration and has obtained the necessary documents from them.

For the most part, the benefits of Public Law 346 (the G. I. Bill of Rights) are not open to any who were not in training on July 25th, 1951 or who have interrupted training since that time. There are some circumstances under which these benefits are open to the veteran, but each case must be cleared in advance with the Veterans Administration.

The government benefits available under Public Laws 16 and 894 (Vocational Rehabilitation Acts) for veterans who received service connected disabilities are provided for only after review of each individual case by the Veterans Administration.

Many young men and women who have had active duty in the armed forces during the period which began with the Korean conflict are eligible for educational benefits under Public Law 550. Veterans in this group are urged to begin preliminary application with the Veterans Administration well in advance of the

date they expect to enter the University. Under this law the veteran receives monthly payments which cover educational expenses (fees and books) as well as subsistence. As most of the fee and book expense must be paid at the beginning of the school term it is essential that the veteran be in a position to meet these expenses as they are due which will almost always be before any remittance has been received from the government. Veterans expecting to attend college under PL 550 are urged to familiarize themselves with the requirements and restrictions relative to the benefits of this act. Officials of the Veterans Administration should be consulted on any points not clear to the student or prospective student. It is especially important that the student understand the procedures that must be followed to obtain Veterans Administration approval of original choice or any change of educational objective.

All veterans who believe they are entitled to educational benefits are urged to contact the appropriate Veterans Administration office in order that the decision may be made in their individual case. Veterans who at the time of registration do not have the necessary papers showing clear entitlement to government benefits are required to pay their own fees. If the proper clearances are subsequently presented to the Office of the Registrar, authorization for refund of fees and expenses appropriate in the individual case will be issued.

COLLEGE CREDIT FOR SERVICE TRAINING

Veterans may be entitled to credit for training and experiences obtained in the armed forces during the war in accordance with the recommendations of the American Council on Education as set forth in "A Guide to the Evaluation of Educational Experiences in the Armed Services." All veterans entering or reentering the University should consult the Assistant Director of Admissions in the Office of the Registrar. In many cases it will be helpful to the student and his dean in planning a program if this can be done in advance of registration.

REGISTRATION FEES AND TUITION

	Three Week Term	*Eight Week Term*
Florida Students	$ 20.00	$ 45.00
Non-Florida Students	55.00	145.00
Florida and Non-Florida students enrolled for thesis only (not to exceed four semester credit hours) (such students are not entitled to student activity or infirmary privileges)	20.00	20.00
Florida Students—Forest Ranger School	*	55.00
Non-Florida Students—Forest Ranger School	*	175.00

Fees for registration after the regular registration period are increased $5.00. There are no waivers of the increased fees for any reason.

*Not Offered.

SPECIAL FEES

Graduation Fee—Bachelor's Degree	$ 10.00
Graduation Fee—Master's Specialist's or Doctor's Degree	20.00
Applied Music Fee*	30.00
Practice Room Rental	5.00
Instrument Rental	5.00

*Applied Music courses are offered during the eight week term only.

SPECIAL FEES

Breakage Books. Any student registering for a course requiring locker and laboratory apparatus in any department is required to buy a breakage book. Breakage books cost $3.00 or $5.00 each as determined by the department and laboratory concerned. A refund will be allowed on any unusued undetached coupons upon completion of the course, after the student has checked in his apparatus to the satisfaction of the departments concerned. Breakage books are sold and redeemed at the Student Bank.

Graduate Record Examinations. The Aptitude Test of the Graduate Record Examinations is required for admission to the Graduate School. A fee of $8.00 covers the cost of this examination. Students who take one of the Advanced Tests of the Graduate Record Examinations in combination with the Aptitude Test pay a fee of $12.00. For further information see the Graduate School Section of the Catalog.

REFUND OF FEES

A student cancelling his registration on or before the date scheduled for the first class meetings of the summer term will be entitled to a full refund of registration and course fees.

A student whose registration is cancelled by official University action at the beginning of the summer term, but on or before the date indicated in the University Calendar covering the term involved shall be refunded all tuition, registration and course fees less a fixed charge of three dollars.

A student who withdraws or is suspended by University action after the catalog date set for full refund less three dollars and on or before the day which marks the end of the first week of classes shall be refunded 50% of tuition, registration and course fees.

STUDENT BANK

Banking facilities are available to students on the campus through the Cashier's Section, Office of the Business Manager, Room 1, Administration Building. The purpose of this service is to provide a safe-depository for cash balances which the student may withdraw as needed. A fee of seventy-five cents per summer term is charged regardless of the number of deposits or withdrawals. A machine-posted pass book is issued to each depositor and must be used for all transactions.

LIVING EXPENSES

Meals may be obtained on campus at reasonable cost. Cafeteria service is available at several campus locations operated by the Food Service Division of the University. Several restaurants and cafeterias are located adjacent to the campus. Lodging is available in University housing facilities, in private rooming houses off-campus, and in fraternity and sorority houses.

STUDENT LIFE—SERVICES, FACILITIES, ACTIVITIES, REGULATIONS

OFFICE OF THE DEAN OF STUDENT PERSONNEL

The Dean of Student Personnel coordinates the counseling and service activities which are available to aid the student in solving personal and educational problems and to help him in selecting a balanced program of social and recreational activities.

OFFICE OF THE DEAN OF MEN

The Dean of Men, as a counselor to men students, is interested in the total life of the student, including his academic, financial, social, and recreation activities. In cooperation with the Dean of Women, his office serves as a clearing house for all non-classroom activities. The Dean of Men serves as an adviser to student self-government so that these activities may provide training in citizenship and leadership. He cooperates with the Director of Housing in providing counseling for men who live in University housing facilities.

OFFICE OF THE DEAN OF WOMEN

The Dean of Women has broad responsibilities for the welfare of women students. She serves as a counselor to students on a variety of problems and interests including personal, academic, financial and social.

In cooperation with the Dean of Men and the Adviser to Student Organizations she serves as an adviser to student government and other student organizations.

The Dean of Women in cooperation with the Director of Housing, acts in an administrative, supervisory, and counseling capacity with relation to the University residence halls and women's fraternity houses.

OFFICE OF THE DIRECTOR OF HOUSING

The Office of the Director of Housing coordinates the residence halls and Flavet programs and operations and compiles off-campus housing information and listings. See section on "Housing" for details.

OFFICE OF THE ADVISER TO FOREIGN STUDENTS

The Adviser to Foreign Students is the coordinator of arrangements for all alien students at the University. His office cooperates with other University agencies in handling admissions and financial aids for students from abroad. The office is primarily responsible for the reception and orientation of new foreign students and for all of the University's relations with the U. S. Immigration Service. The Adviser to Foreign Students cooperates with other officials and agencies of the University in providing necessary counseling for foreign

students on personal, academic, financial, language or social problems. Assistance in an advisory capacity is provided for persons interested in study or travel abroad and for individuals and organizations concerned with international understanding and intercultural exchange.

STUDENT ORGANIZATIONS OFFICE

The student organizations office is interested in the activities of all organized student groups on the campus. It maintains complete records of these groups, including date of recognition, officers, constitution, etc. This office is also the authorization agency for social activities of all student organizations and provides information regarding regulations for such activities.

The Assistant Dean of Men is in charge of the student organizations office and should be contacted regarding the formation and recognition of new student organizations and regarding any problems which may arise concerning the operation of student organizations.

UNIVERSITY PLACEMENT SERVICE

University Placement Service is the core of the University placement system. It serves as the coordinating agency for all placement activity on campus by working in cooperation with the University departments, schools, and colleges. At the present stage of development, the U. P. S. supplements the placement activities which are carried on by various colleges, and offers direct assistance to graduating students of colleges who do not have their own placement activity.

The primary objective of the placement system is to assist students in the problem of finding suitable employment following graduation. This is done by supplying students with vocational information, information concerning job opportunities, and also assisting them in the preparation of credentials for presentation to prospective employers.

Representatives from business, industry, and government who visit the campus or write this office are given every opportunity to engage qualified University of Florida graduates.

FLORIDA CENTER OF CLINICAL SERVICES

The services of the five clinics which operate as a coordinated unit under the Division of Student Personnel are available to all University students without charge. Students are urged to seek assistance before their problems or difficulties become aggravated. The services of the clinics are available to the residents of the State of Florida for diagnostic purposes, therapy and counseling to the extent that off-campus subjects are needed in training programs and as personnel and facilities will permit.

PSYCHOLOGICAL CLINIC

One of the functions of this unit is to aid the student on an individual basis to plan a vocational objective consistent with his capicities, interests, and temperament. Approved test and counseling methods are used, and results are supplemented by detailed occupational information. Other services of this unit include help to students who find their work hampered by worries, adjustment difficulties, and other troublesome conditions. In addition to the above functions, the Psychological Clinic works closely with the Department of Psychology in its program for the training of clinical psychologists and counseling psychologists.

SPEECH AND HEARING CLINIC

This clinic conducts a speech and hearing examination during orientation week of all freshmen and transfer students. The personnel of this unit are available to all University students who have speech and hearing problems which are handicapping in nature. In addition to losses in hearing such impairments include: stuttering, cleft palate speech, articulatory problems, voice abnormalities and other deviations from acceptability. This clinic operates as a laboratory for those students in the Speech Department who are training for speech and hearing therapists, speech pathologists, and audiologists.

READING LABORATORY AND CLINIC

Through the use of interviews and diagnostic tests, this clinic plans a program of study and training in reading skills for each individual who demonstrates a need for assistance. The program is planned according to the needs of the student, the time available in the student's schedule, and the amount of training necessary for permanent improvement of reading skills. In addition to remedial functions, this unit trains teachers and graduate students in the techniques of diagnosis and remediation. The clinic also carries on a program of research in many aspects of the field of reading and aids students and faculty members engaged in allied research. This clinic is an integral part of the C3 program.

ADAPTED EXERCISES CLINIC

This program assists those students who have physical deviations which necessitate individual consideration in developing a sports program that is within the limits of their physical capacity. Due consideration is given to the individual's interests as well as the social and recreational needs for adult life. Programs of functional exercise are provided for those students having physical deviations that can be corrected or improved. The work is conducted under careful supervision and is based on adequate medical diagnosis and information.

MARRIAGE AND FAMILY CLINIC

The Marriage and Family Clinic deals with marital, premarital and family adjustment problems. Clients are assisted in gaining insight into problems and in weighing advantages and disadvantages of alternative adjustments. University students will find understanding and help in the solution of their marital and premarital problems.

OFFICE OF STUDENT PERSONNEL RECORDS

Using various sources, the Office of Student Personnel Records collects and integrates information concerning social and scholastic activities of each student. It makes this information available to qualified counselors who aid the student in making educational, social, psychological, and vocational adjustment. The keeping of personnel records is an effort in the understanding of, and service to, the individual student as he has contact not only with the classroom, but also with all phases of his university life.

STUDENT EMPLOYMENT

Every effort is made to aid qualified students in obtaining part-time employment. Opportunities are limited; consequently the number of part-time jobs available does not approach the number of applicants seeking these jobs. Every effort is made to place students in work that utilizes their training and experience.

Each student who is employed by the University must have an honor point average of C for the semester or term immediately preceding his employment. The average rate of pay per hour is between 60 cents and $1.00; the average earnings per month are about $50.

Student employment is directed by the Committee on Student Aid, Scholarships, and Awards, with the Assistant Dean of Men administering the program. All applications for work should be made prior to the opening of the semester in which employment is desired. Application for work, however, may be filed at any time.

Inquiries should be addressed to:

Assistant Dean of Men
University of Florida
Gainesville, Florida

SCHOLARSHIPS AND LOAN FUNDS

For information on scholarships and loans at the University of Florida students should refer to the Dean of Students, who is chairman of the Committee on Student Aid, Scholarships and Awards, and to the regular session catalog or the special bulletin on Scholarships, Loan Funds and Student Employment for details on the various types of aid.

HOUSING

GENERAL INFORMATION

Each student must make personal arrangement for his housing either by (1) applying to the Office of the Director of Housing for assignment to the University Housing Facilities or, (2) in the case of an upperclassman who wishes to do so, obtaining an accommodation in private housing or in his fraternity house.

All inquiries concerning housing applications, deposits, or rent payments in University Housing Facilities should be addressed to the Director of Housing, University of Florida, Gainesville. Checks or money orders for room deposits or rent payments should be made payable to the University of Florida and mailed to the Office of the Business Manager, Cashier, together with the application or rent invoice. Cash should NOT be sent through the mail.

An application for housing space may be filed at any time. Prospective freshmen are urged to apply for housing as early as possible.

A deposit payment of ten dollars must accompany the application for housing. Each applicant is given advance notice of exact assignment and deadline date for rent payment, if possible. Each applicant should read carefully the terms and conditions covering housing assignments as stated on the back of the application form and on the notification of assignment.

Roommate requests are honored wherever possible, provided the individuals wishing to room together submit their applications and pay room deposits at the same date, clearly indicate on their respective applications their desire to room together. A large number of selected foreign students are available for assignment as roommates with American students who are interested in foreign languages, trade, and international relations; any student interested in the program should indicate this on his application.

RESIDENCE REGULATIONS

All freshman men and all single undergraduate women, with the exception of those whose residence is Gainesville or vicinity, are required to live in University Housing Facilities as long as space is available. With University approval undergraduate women students, excepting freshman, may live in their sorority houses.

HOUSING ADMINISTRATION AND SERVICES

Carefully selected and trained personnel are in charge of each area. Students with personal problems or questions concerning procedure or policy are aided by Head Residents, Resident Advisers, and Student Counselors.

The rates quoted are subject to change. All facilities are equipped with basic furnishings of beds, mattresses, dressers, desks, and chairs. Residents are encouraged to bring their own drapes, pictures, bedspreads, rugs, and lamps.

Linens may be rented on a weekly exchange basis; pillows, blankets, and some extra equipment may be rented on a term or semester basis. Linen rates per week are: sheets, 15¢ each; towels, 8¢ each; pillow cases, 6¢ each. Blankets, pillows, and lamps are 60¢ per Summer Session.

Heavy luggage may be sent ahead, prepaid, addressed in the student's name and showing his assigned room number. Such shipments will be held until called for by the student. The University assumes no responsibility beyond the exercise of reasonable care for any shipment so received.

RESIDENCE HALLS FOR SINGLE STUDENTS

Mallory and Yulee Halls

These halls of modern design and of brick, concrete, and steel construction are normally reserved for undergraduate women students. Features include: office-to-room intercommunication system; post-office boxes for each room in building lobbies; large lounge for each building; study lounge on each upper floor; large recreation rooms; laundry and other self-service facilities. Double and single rooms only, with the number of single rooms limited. Community bath facilities on each floor. Hot water system thermostatically controlled for each building. Fluorescent lighting. Rates per 8-weeks Summer Session (subject to change): Single room $46.75 per student; double room, $40.00 per student; double room assigned as single $60.00 per student.

Buckman, Thomas, Sledd, and Fletcher Halls

The four halls of modern brick, concrete, and steel construction are normally reserved for men students. Each hall is divided into separate sections with accommodations for from 30 to 48 students per section. All but a few rooms have lavoratories, and there is a community bath on each floor in each section. There

are lounges, recreation rooms, and laundry facilities in the area. Room types: two-room suites for two, double rooms for two or three students, and single rooms. Summer Session rates range from $26.50 to $33.00 per student per 8-weeks Summer Session. (Murphree Hall will not be available for use by single students during the Summer Session.)

FACILITIES FOR MARRIED COUPLES AND FOR WOMEN WITH CHILDREN

Three Apartment Villages (Flavets), located on-campus, have been provided through the Public Housing Authority. Applications may be filed at any time and should be sent as soon as possible. Although applications are being accepted from non-veterans for assignment, no such assignment can be made until all veteran applications have been placed. Applications from married veterans have exceeded the space available for the past three years and it is doubtful that any non-veteran can expect assignment for the 1957 Summer Session. Flavet I contains 26 buildings of one-story, temporary construction, divided into 100 apartment units of one, two, or three bedrooms. Flavet II, similar to Flavet I in construction, contains 20 buildings divided into 76 apartment units, of one, two, or three bedrooms. Flavet III contains 54 buildings, of two-story, temporary construction, divided into 448 apartment units of one or two bedrooms. All apartments are equipped with basic furniture requirements, but residents must furnish their own linens, rugs, kitchenware, etc. Cooking and heating are by gas, metered to the individual apartments. Electricity consumption in excess of the basic minimum is paid on a monthly basis on meter readings. Rent rates per month (including basic electricity) are one-bedroom apartment, $26.75; two-bedroom apartment, $29.50; three-bedroom apartment, $32.50.

Murphree Hall, Sections J and K will be available for assignment to couples and to women with children. The accommodations consist of two room suites (study room and bedroom). All suites have lavatories, and there is a community bath with shower and toilet facilities on each floor in each section. Cooking or preparation of food is not permitted. Summer Session rates are $59.50 per suite per eight weeks term.

OFF-CAMPUS HOUSING

Private homes and privately operated rooming houses and apartments provide many accommodations for students.

Off-campus listings are maintained in the Housing Office but are not compiled for mailing since availability changes constantly and a mutually satisfactory rental arrangement can normally be made by the student *only* after personal inspection of facilities and conference with the householder. Students seeking off-campus housing should come to Gainesville well before the school period to confer with the Housing Office about accommodations. Advance appointments for conferences may be made.

Arrangements for the September semester should be completed between the middle of June and the middle of August, for the February semester, during January, and for the Summer Session between the middle of April and the end of May.

COOPERATIVE LIVING ORGANIZATION

The Cooperative Living Organization, organized and operated by students to furnish economical living accommodations for its membership, is located at 117 NW 15th St. The qualifications for membership are financial need, scholastic ability, and references of good character. In order to secure membership in the CLO, students should apply to the CLO Vice-President at the above address.

SPRINGFIELD HALL

Springfield Hall, organized in September 1951, is the first women's living cooperative to be established on the campus. It is sponsored by the Wesley Foundation and is open to any student at the University who is interested in Christian cooperative living. It is organized on a non-profit basis, with each member being assessed her pro rata share of the actual operating cost.

Application for membership may be made at the Wesley Foundation, 1320 West University Avenue.

FRATERNITIES AND SORORITIES

Most national fraternity and sorority chapters maintain their own houses adjacent to the University campus. Freshman women are not permitted to live in sorority houses. Special regulations apply to freshman men living in their fraternity houses. University student regulations are in effect for all sorority and fraternity houses.

GENERAL INFORMATION

LECTURES, PLAYS AND EXHIBITIONS

The University presents outstanding lectures as part of the general educational and cultural life of the campus. The speakers are selected with a view to offering to the University community stimulating presentations in the different areas of learning.

During the Summer Session, under the direction of the Department of Speech, full length plays, experimental one-act plays, and interpretative reading programs are presented. The University provides facilities for high grade performances under competent direction.

Exhibitions of contemporary work in the arts are brought to the campus under the sponsorship of the University Center of the Arts. Such exhibitions provide an opportunity to study examples of the best contemporary work in painting, industrial design, furniture, crafts, community planning, architecture, and the other arts.

RELIGIOUS AND SOCIAL LIFE

The leading religious denominations have attractive places of worship and students are welcome at every service. Students interested in the study of religion and in preparing themselves for religious leadership may take courses offered by the Department of Religion. Vesper services are conducted weekly on the campus lawn or in the Florida Union.

UNIVERSITY OF FLORIDA LIBRARIES SERVICES

The University Libraries, consisting of the General Library and 12 college, school and departmental libraries, contain more than 500,000 volumes and receive currently approximately 3500 serials.

The larger part of the library holdings are kept in the General Library building where four reading rooms offer seating space for 1200 readers. Located on the first floor is the University College Reading Room which has on open shelves some 8000 volumes useful to students in the first two years of college. The Humanities Reading Room and the Social Sciences Reading Room, on the second floor, are designed primarily as centers of library activity for the upperclassmen in the humanistic and the social studies. Around the walls on open shelves in each of these rooms are approximately 15,000 volumes and current issues of learned journals. On the third floor is the Science Reading Room with books and complete sets of journals in psychology, general science, mathematics, physics, geology and geography. Additional services in the General Library are the Browsing Room for recreational reading, the Map Alcove and Reading Room, music rooms, seminar rooms, and carrels and study cubicles for faculty members and graduate students.

The Library collection is particularly strong in Floridiana with research centered in the P. K. Yonge Library of Florida History, located on the first floor of the General Library building. Manuscripts and books by Florida authors are collected in the Florida Authors Room, which is the center for activity in creative writing.

Libraries for Agriculture, Architecture and Allied Arts, Biology, Chemistry-Pharmacy, Education, Engineering, Forestry, and Law are located in or near buildings housing the corresponding instructional units. The Library serving the extension activities of the University is located in the Seagle Building. The P. K. Yonge Laboratory School Library serves the Laboratory School.

STUDENT HEALTH SERVICE

Applicants for admission to the University are furnished a medical history and physical examination form by the Registrar's Office. The medical history is completed by the applicant before going to his physician for the physical examination. The physical examination must be performed and completed by a licensed Doctor of Medicine (M.D.) and mailed by the doctor directly to the Director, Student Health Department, University of Florida, Gainesville, Florida, using the business reply envelope supplied for that purpose. The medical history and physical examination must be reviewed by a University Physician before the applicant is cleared for registration in the University. The type of physical education for which the applicant is qualified, and the physical eligibility of male students for R.O.T.C. training, is determined on the basis of this pre-entrance examination, after conference and possible further examinations of those with reported physical defects. In cases where a defect is thought to exist, the student is requested to forward a letter from the family physician giving full details of diagnosis and treatment, in order that these may be incorporated in the record for later reference if treatment should be required, and to further determine eligibility for physical education and R. O. T. C.

The Student Health Department strives to prevent students with communicable diseases from entering the University. All students enrolled at the University

are given annual chest x-rays by the State Health Department and every effort is made to detect evidence of tuberculosis of which the student may be entirely unaware. (Faculty members and employees of the University are also given annual chest x-rays.) Late registrants will be charged a special fee of $2.00 for their chest x-ray if units of the State Health Department or the Alachua County Health Department are not available. Students must have been successfully vaccinated against smallpox within the past five years. No exceptions are made to this ruling. Students who have not been vaccinated within five years are given this vaccination during registration week. The Infirmary, however, advises students to take care of this requirement before coming to the University, as the immunization limits participation in swimming and other required activities for a number of days after being applied. It is also advised that all students be immunized for typhoid fever and tetanus prior to arrival in Gainesville.

The University maintains the Student Health Department in the Infirmary building on the campus for the protection and medical care of the students in residence. The Outpatient Clinic is open during the day from 8:00 A.M. to 12:00 Midnight, to provide all students in need of medical care with consultation and treatment. Between the hours of 12:00 Midnight and 8:00 A.M., the building is locked, but students who are in need of medical care are seen by the Nursing Staff stationed on the hospital floors of the building. A call-bell at the entrance will summon a Nurse to the Clinic. A physician is on 24 hour call to care for emergencies too severe to be cared for by the Nursing Staff.

The Hospital, consisting of 65 beds, provides the students in need of hospitalization with twenty-four hour general nursing care. Patients entering the hospital are under constant observation by a University Physician. Between the hour of 9:30 P.M. and 7:30 A.M., an automobile is kept at the Infirmary to transport students from the Residence Halls to the Infirmary for medical care. Students are urged to report to the Infirmary at the first sign of an illness. In all cases where the illness is thought to be of more than average severity, parents will be notified by collect telephone by physician in charge of the case.

The Student Health Department gives as complete a diagnostic, treatment, and public health program as possible within the limitations of its personnel and equipment. It is staffed and organized for treating the acute illnesses which commonly occur while the student is in residence at the University. Facilities at the University Infirmary include the services of a competent medical staff, a psychiatrist, x-ray and clinical laboratories, pharmacy, and a physical therapy unit.

There are no facilities for dental work or eye refractions in the Student Health Department and therefore students are urged to have defects of vision and teeth corrected before coming to the University.

Some minor surgery is performed at the University Infirmary, but no major surgery. Major surgical operations are performed only with the consent of the student and/or parent or guardian, and at their expense. Whenever an emergency is imperative, the student shall be referred to a competent surgeon and transferred to the Alachua General Hospital in Gainesville, which is fully approved for surgery by the American College of Surgeons. Students receiving severe, multiple or compound fractures will be handled in the same manner as students in need of emergency surgery.

Competent physicians and surgeons in Gainesville cooperate readily with the Student Health Department in consultations. Whenever a student is found

to be in need of a consultant, the University Physician will arrange for such a consultation. Local physicians are also available for medical service to students at their places of residence at the student's expense.

Health service is available only to those students currently enrolled in the University who have paid the student health fee. In the case of married students, who are unacquainted with local physicians, the Student Health Department will be glad to recommend well qualified physicians to attend their families.

The Health Fee does not include surgery, consultation, or special duty nursing. These must be paid by the patient. Laboratory work done at the Infirmary is free of charge, but any work that has to be referred elsewhere is the responsibility of the patient. Diagnostic x-ray service is offered at a very nominal cost. All x-rays are interpreted by a qualified Radiologist. A charge of $2.20 per day is made for students admitted to the Infirmary as inpatients.

The University is not responsible for the medical care of students during vacations, but, in certain instances, it may make special arrangements for the continued care of students who were hospitalized before the vacation period.

During epidemics, the facilities of the Student Health Department may be so overtaxed that the care of all ill students at the Infirmary will be impossible. In such an emergency every effort will be made to provide for the care of students outside of the Infirmary, but the Student Health Department will not assume payment for services rendered by outside physicians or other hospitals.

ANNOUNCEMENTS

The *Orange and Blue Bulletin* is the official bulletin of the Summer Session. This mimeographed sheet, published every other day during the Summer Session and posted on all bulletin boards, carries notices of changes in schedule, meetings, and other pertinent information. Announcements made in the General Assembly; notices on the bulletin boards in Florida Union, Peabody Hall, and Anderson Hall; and news items in the *Summer Gator* serve to keep the Summer Session students informed concerning student activities.

ORGANIZATIONS

PHI KAPPA PHI

A chapter of the Honor Society of Phi Kappa Phi was established at the University in 1912. To be eligible for consideration for membership, a student must previously have earned at the University at least thirty semester hours of credit, must have been guilty of no serious breach of discipline, and must stand among the upper tenth of all candidates for degrees in his college. Eligibility for consideration for membership is assured every student within an honor point average of 3.30 or higher, but a student who comes within the quota of his college may be considered if his honor point average is not below 3.00. Graduate students meeting certain prescribed requirements are also considered for membership.

GAMMA SIGMA DELTA

A chapter of Gamma Sigma Delta, the Honor Society of Agriculture, was established at the University in 1955. The objectives of the Society are to encourage high standards of scholarship in all branches of Agricultural Science

and Education and a high degree of excellence in the practice of agricultural pursuits, by the election to membership of those students of the graduating and postgraduate classes in the Agricultural College who have shown exceptional ability during their undergraduate or graduate work, and of those alumni and faculty members who have rendered signal service to the cause of agricultural development. Minimum requirements for membership for graduating Seniors are, in general, 3.0 average, at least one year's residence at time of consideration for election, and high moral character. Graduate students must have shown ability to do satisfactory work in advanced study in agriculture, and must have completed at least one semester or its equivalent in the Graduate School at the University of Florida.

KAPPA DELTA PI

The Upsilon Chapter of Kappa Delta Pi was established at the University of Florida in 1923. The purpose of the society is to recognize and promote merit in educational study and service. Both men and women are admitted to membership. Members are chosen from juniors, seniors, graduate students, faculty, and alumni. Requirements for membership are, in general, as follows: a scholastic average in the upper quintile; evidence of abiding interest in educational service; a good professional attitude; and good personal-social characteristics. During the Summer Sessions the chapter holds a meeting each week.

PHI BETA KAPPA

Phi Beta Kappa was established on the campus of the University of Florida in 1938. It is the oldest national fraternity, being founded in 1776. In conformity with the national objectives of the society, the University of Florida chapter restricts election to the College of Arts and Sciences. Not more than 15 per cent of the senior class graduating in each semester, including the graduating class of the Summer Session is eligible for election.

In addition to conferring membership upon qualified seniors in the College of Arts and Sciences, the society seeks, by means of an Award in Recognition of Creative Achievement, to honor each year not more than one graduating senior from all the colleges on the campus who, irrespective of his honor point average, has distinguished himself throughout his undergraduate career in such fields of activity as creative writing, dramatics, and forensics, the fine arts, or any other liberal discipline, and has revealed a decided talent, a persistent interest, and a prospect of mature achievement in later life.

PHI DELTA KAPPA

Beta Xi chapter of Phi Delta Kappa, national professional education fraternity for men, was installed at the University of Florida early in 1949. Dedicated to ideals of research, service and leadership, this organization is one of the oldest and largest professional fraternities. Men are chosen for Phi Delta Kappa on the basis of scholarship, leadership, potentiality, and qualities of personality considered as promising for the development of public education in the state and in the nation.

RECREATION

THE FLORIDA UNION

The Florida Union, the official center of student activities, is financed primarily by student activities fees. Some of the facilities and services offered by the Union include music listening rooms, a craft and hobby shop, photographic darkrooms, browsing library, game room, and lounges where students may spend leisure hours. Fifteen guest rooms are available for guests of students and University personnel. The Union also provides an embosograf poster service, information desk, a Western Union substation, auditorium, and meeting rooms for student activity groups. Offices for the President of the Student Body, the Executive Council, Honor Court, and all student publications are located in the Florida Union.

The Florida Union Social Board, composed of students interested in planning student activities, sponsors a variety of social programs for the student body. Some of the regular activities sponsored by the Social Board are bridge tournaments, dancing classes, coffee hours, movies, outings, dances, and Club Nautilus (the campus night club). Other special activities are sponsored by the Social Board during the year. The committees of this board are open to all interested students.

The University's Camp Wauburg operated by the Florida Union is a recreational area for the exclusive use of University personnel. This area is located nine miles south of the campus. Facilities include a large picnic area, a recreational building, a bath house, and a play ground area for volley ball, horseshoes, badminton, softball. Camp Wauburg has swimming, boating, and fishing facilities.

INTRAMURAL AND RECREATIONAL ATHLETICS

A broad recreational program of athletics will be conducted for the students and faculty by the College of Physical Education and Health during the Summer Session.

A Summer Session all-campus league will be organized with competition in softball, tennis (singles and mixed doubles), shuffleboard (singles and mixed doubles), swimming, volleyball, table tennis, and handball tournaments, appropriate awards will be made to winning teams and individuals in all sports.

A sports' clinic will be conducted prior to the tennis, volleyball, and handball tournaments. Students have the opportunity to learn skills in recreational sports through the Department of Required Physical Education. Further information may be obtained at Room 134, Florida Gymnasium.

The athletic and physical educational facilities, including the use of the swimming pool and equipment room service, will be available to all *bona fide* University students. Use of these services and facilities will also be extended to students' families, faculty, employees, and their immediate families, upon payment of a fee of $1.00 per individual. The *Summer Gator*, the *Orange and Blue Bulletin*, and the *Florida Intramural Bulletin* will carry current notices and announcements about various phases of the program.

SWIMMING POOL

The swimming pool will be open daily during the Summer Session. Dressing facilities for women are located in the Women's Gymnasium. The facilities for men are located in Florida Gymnasium.

THE DIVISION OF MUSIC

The Division of Music offers opportunities during the Summer Session for those students interested in participating in bands, orchestras and choral groups.

RELIGIOUS AND SOCIAL LIFE

The leading religious denominations have attractive places of worship and students are welcome at every service. Students interested in the study of religion and in preparing themselves for religious leadership may take courses offered by the Department of Religion.

ACADEMIC REGULATIONS

STUDENT RESPONSIBILITY

Each student must assume full responsibility for registering for the proper courses and for fulfilling all requirements for his degree. Several days before registration students should confer with the deans of their respective colleges regarding choice of courses. Juniors and seniors should confer with the heads of the departments in which they expect to earn majors. Candidates for graduation must file, in the office of the Registrar, formal application for a degree and must pay the diploma fee very early in the term in which they expect to receive the degree. The official calendar shows the latest day on which this can be done.

Courses can be dropped or changed only with the approval of the dean of the college in which the student is registered and by presentation of the cards authorizing the change at the office of the Registrar.

CREDITS

The term credit as used in this bulletin in reference to courses is equal to one semester hour.

RESIDENCE REQUIREMENTS

1. The minimum residence requirement for the baccalaureate degree is two semesters, or one semester and three six-week summer terms, or one semester and two eight-week summer terms, or one semester and two nine-week summer terms, or five six-week summer terms, or four eight-week summer terms or four nine-week summer terms. New students offering advanced standing must meet this requirement after entrance to the University. Students who break their residence at the University by attending another institution for credit toward the degree must meet this requirement after re-entering he University.

2. Students are required to complete the last thirty credit hours (except in the College of Law) applied toward the baccalaureate degree during regular residence in the respective college from which they expect to be graduated. Exception to this regulation may be made only upon written petition approved by the faculty of the college concerned, but in no case may the amount of extension work permitted exceed more than twelve of the last thirty-six hours required for a baccalaureate degree.

3. For the degree of Bachelor of Laws, a student must complete at least 96 weeks of study in residence in an accredited law school of which at least 62 must has been in residence in the College of Law, University of Florida. The last 28 credits and the last 30 weeks of study must be in residence in this College unless other arrangements are made in advance by written petition approved by the faculty of the College of Law. (In the case of a student admitted prior to September, 1953, completion of at least 90 weeks of study in residence at an accredited law school is required of which at least 56 weeks must have been in residence at this College.)

4. For residence requirements for the various graduate degrees see the Graduate School section of this bulletin.

AMOUNT OF EXTENSION WORK PERMITTED

No student will be allowed to take more than one-fourth of the credits toward a degree by correspondence study and extension class work. Extension work to apply on the last thirty hours is authorized only by special action of the faculty of the college in which a student is registered. Such authorization must be obtained prior to enrollment in extension work. If authorization is given, no student is permitted to earn more than twelve of the last thirty-six hours in this manner. Under no circumstances will a student in residence be permitted to register for a correspondence course if that course is being offered in the Summer Session.

MAXIMUM AND MINIMUM LOAD

The maximum load for which an undergraduate may register in an eight-week term is 9 semester hours. The maximum load in a six-week term is 6 semester hours.

The minimum load for any student is three semester hours. Original registration for less than three hours must be approved by the Dean of the college in which the student is enrolled. After registration, the student may reduce his load to less than three hours only with the approval of the Senate Committee on Student Petitions.

UNCLASSIFIED STUDENTS

1. This group will include (a) students from other colleges and universities who wish to earn credits in the Summer Session to be transferred eventually to their respective institutions, and (b) other students not candidates for degrees.

2. In the event any student who has attended a Summer Session as an unclassified student later wishes to become a candidate for a degree in one of the colleges or schools of the University, he may do so (1) by regularizing his admission to the University (present all the credentials required) and (2) by meeting the requirements (in effect at the time of his application for candidacy) for admission to the school or college he desires to enter.

3. If such a student is admitted to candidacy for a degree, credits earned while an unclassified student will be accepted insofar as they apply toward the degree requirements (in effect at the time he is admitted to candidacy) of the college or school chosen by the student. A student must have been registered as a regular student in the college or school from which he expects to receive the

Bachelor's Degree for at least three six-week summer terms or two eight-week summer terms, and in the Graduate School for at least five summer terms for the Master's Degree. The residence requirement (see above) in the University will not be waived in any case.

4. Students regularly enrolled during the academic year cannot become unclassified students during the Summer Session.

5. Each student registered as an unclassified student will be given a definite statement of the policies governing the application for admission to candidacy, in the various colleges and schools. This statement will make clear that credits earned while a student is registered as an unclassified student can be applied toward a degree in the college of his choice only if under regular procedure this credit will apply toward that degree.

6. The registration blanks for unclassified students will be approved by the Registrar and assistants chosen by him from the faculty.

ABSENCES OR UNSATISFACTORY WORK

Absences count from the first meeting of the class rather than from the date a student registers for a class.

A. If any student accumulates absences or fails to do class work to the extent that further enrollment in the class appears to be of little value to him or detrimental to the best interest of the class, it shall be the duty of the instructor to warn such student in writing that further absences or failure to do class work will cause him to be suspended from the course with a failing grade. Where possible this warning will be delivered personally; otherwise, it will be mailed to the student's last University address by the Registrar. Instructors shall immediately report all such warnings to the department head or course chairman. Should any absences or failure to do class work be incurred after this warning, the student will be suspended from the class and be given a failing grade by the Registrar upon receipt of notice from the instructor showing the date of warning.

   Should this reduce the load of the student below the minimum required, he will be suspended from the University.

B. When a student is suspended from a course under the provisions of A above, his parents shall be notified in writing by the Registrar.

C. A student who has been warned for absences or unsatisfactory work in any class should not incur additional absences in that course even though he has not been absent from the class for nine scholastic days. It is the responsibility of the student to see that his class work and attendance is satisfactory.

PROBATION, SUSPENSION, AND EXCLUSION FOR ACADEMIC REASONS

The University of Florida accepts the responsibility of providing sound higher education. This includes the obligation to both the public and to the student of providing good higher education in an economical and efficient manner. In order to discharge this responsibility, the University must require reasonable academic progress from its students in return for the opportunity afforded them by a tax

supported state university. To continue the registration of students who have demonstrated that they do not possess the necessary ability, or preparation, or industry, or maturity to obtain a reasonable benefit from a program of University study is inconsistent with this responsibility.

Consequently, the University of Florida Senate has enacted the following University regulations covering probation, suspension, and exclusion for academic reasons. Any college of the University may enforce additional academic standards and each student is responsible for observing the regulations of his college relating to such additional standards.

It is important to note that a student may be placed on various kinds of probation for reasons other than those listed below. For example, he may be admitted to the University on a probationary basis or he may be placed on disciplinary probation by reason of conduct or, in some cases, he may be placed on probation by the Committee on Student Petitions. In cases such as the foregoing the individual student will receive in writing a specific set of conditions which he must meet in order to remove the probation. In most cases these conditions will require loads, grades, etc., that are above the minimums set forth below. Inasmuch as such a student will have been placed on one of these specific probations only because of some previous academic difficulty or misconduct, in his particular case the specific terms of probation which are set forth for him become the necessary minimum achievement rather than the conditions set forth below.

ACADEMIC PROBATION

Lower Division Students:

1. A Lower Division student who fails to maintain a 1.0 honor point average for all work atempted in his first or second semester at the University of Florida will be placed on academic probation for his next semester.

2. A Lower Division student on academic probation (Under Article IV or XV) during his second semester will be ineligible for further registration in the University unless he maintains a 1.0 honor point average in all work attempted in that semester.

3. A Lower Division student who has attempted more than two semesters and who fails to maintain a 1.5 honor point average on all work attempted each semester thereafter will be placed on academic probation for his next semester.

4. A Lower Division student who has attempted more than two semesters and who is on academic probation (Under Article IV or XV) shall be ineligible for further registration in the University unless he maintains a 1.5 honor point average in all work attempted in that semester, or has a 1.5 cumulative honor point average in the total of all work attempted to date.

5. A Lower Division student who has attempted six semesters of work in the Lower Division shall be ineligible for further registration in the University unless he has been admitted to an Upper Division college.

A semester during which a student withdraws after the last date for dropping courses without a failing grade and any semester in which a student is suspended for non-attendance or unsatisfactory work shall be considered as a semester attempted in administering these regulations (Sections 1 through 5 above).

Upper Division Students:

6. Any Upper Division student who fails to maintain a 1.8 honor point average for all work attempted in any semester shall be placed on academic probation for his next semester.

7. An Upper Division student on academic probation (under Article IV or XV) will be ineligible for further registration in the University unless he maintains a 2.0 honor point average in all work attempted that semester or has 2.0 cumulative honor point average in the total of all work attempted while registered in his present Upper Division college.

SUSPENSION

All Undergraduate Students:

8. All Undergraduate students (all those classified other than 6) who do not receive passing grades (A, B, C, or D) in more than one-half of the hours attempted in any term or semester shall be suspended immediately from the University for one full semester; however, failure in only one course carrying five semester hours credit or less shall not cause the student to be suspended under this provision. All Undergraduate students who are dropped from a course for excessive absences or unsatisfactory work and as a result of such drop are left with a load of less than 12 semester hours will be suspended for one full semester. A student eligible to return to the University after such a suspension shall be placed on academic probation for his next semester. The terms for satisfying his probation shall be those provided above appropriate to the number of semesters attempted. A second suspension for academic reasons shall be final and the student will not be eligible for further attendance at the University.

Graduate Students:

9. Any graduate student may be denied further registration in the University or in his graduate major when his progress toward completion of his planned graduate program becomes unsatisfactory.

ADMINISTRATIVE PROVISIONS:

10. All actions taken under these regulations shall be reflected by appropriate notations on the student's record.

11. A student attending a summer session prior to his probational semester may satisfy the terms of his probation if he obtains the necessary probation honor point average as indicated above, computed by taking the grades of his last semester and summer session together.

COMPREHENSIVE EXAMINATIONS

The comprehensive course examinations (of which the student must successfully pass six or more to complete the program of the University College) are administered by the Board of University Examiners and are given in January, May, and August of each year. A student must be familiar with the work of the various courses and be able to think in the several fields in a comprehensive way in order to pass these examinations. Standings on the comprehensive examinations are issued by the Board of Examiners and are not subject to change by any other agency.

APPLICATIONS FOR COMPREHENSIVE EXAMINATIONS

University College students who are enrolled in a course at the time the examination is given need not make application for it. University College students who are not enrolled in a course at the time an examination is given and who wish to take the comprehensive examination must apply in writing to the Board of Examiners for permission prior to the last date set for filing such applications. *Applications will not be accepted from students registered in the colleges of the Upper Division.* Before the application is accepted the applicant will be required to furnish the Board of Examiners with proof that this privilege has not been used to avoid the payment of usual University fees. Applications will be accepted only for those examinations which are administered by the Board of Examiners. The Board of Examiners is the only agency authorized to give University College students examinations by application.

THE UNIVERSITY COLLEGE

INTRODUCTORY STATEMENT

In a reorganization at the University of Florida in 1935, all freshmen and sophomores were placed in one college. The University College administers all the work of the Lower Division, which includes the pre-professional work for the Upper Division schools and colleges and a core program of basic education for all students. In 1944 the American Council on Education defined this program: "General education refers to those phases of nonspecialized and non-vocational education that should be the common denominator, so to speak, of educated persons . . . the type of education which the majority of our people must have if they are to be good citizens, parents, and workers." During his freshman and sophomore years at the University, a student's time is about evenly divided between these objectives of general education and those of pre-professional or professional preparation.

While fully accepting its responsibility toward the professional training of students who remain four years or longer and earn degrees, the University of Florida as a state institution also accepts its civic responsibility to help those who spend only one or two years at the University. These students—more than two-thirds of all enrolled—are not "failures" because they do not continue and earn degrees, and they probably deserve more from the state university than an odd assortment of only "introductory courses." Consequently at the University of Florida a group of comprehensive courses have been worked out to give some unity and meaning to a beginner's program. These comprehensive courses that make up the core program are:

1 *American Institutions* (known hereafter as C-1)
2. *The Physical Sciences* (C-2)
3. *Reading, Speaking and Writing:* Freshman English (C-3)
4. *Practical Logic:* Straight Thinking (C-41)
   Fundamental Mathematics (C-42)
5. *The Humanities* (C-5)
6. *Biological Science* (C-6)

GUIDANCE

If a freshman is still undecided about his life's work, he is not urged to guess on registration day. His program may be made up largely from the comprehensives which help him direct his thinking toward a desirable objective, together with approved electives that may further enable him to explore interests and needs. But whether the student is decided or undecided about his life's work, these comprehensive courses provide basic preparation that every educated person should have.

Thus since the purpose of general education is to replace fragmentation, the program absorbs much of the responsibility for guidance. Every subject or course of the University College program is designed to *guide* the student. During the time that he is making tentative steps toward a profession by taking special subjects to test aptitudes, interests, and ability, he is also studying the several great areas of human understanding and achievement. The work in the University College presents materials which are directly related to life experiences and which will immediately become a part of the student's thinking to guide him to making correct *next steps*. Thus the whole program—placement tests, progress reports, vocational aptitude tests, basic vocational materials, selected material in the comprehensive courses, student conferences, adjustments for individual differences, election privileges, and comprehensive examinations—is a part of a plan designed to *guide* students.

UPPER DIVISION COOPERATION

While the necessary correlation and unification is attempted at the University College Office, throughout the University College period students consult Upper Division deans and department heads to discuss future work. During the last month of each school semester these informal conferences are supplemented by a scheduled formal conference at which each student fills out a pre-registration card for his prospective Upper Division work.

UNIVERSITY COLLEGE COUNSELORS

The University College Counsellors do not assume the responsibility that every student himself must take, but they help in every way possible as he assumes a greater and greater share of responsibility in his University education. The counsellors are located in the University College Office.

Every spring the University is privileged to give placement tests to all seniors in every high school of the state. Since many high schools are also trying to acquaint the student with the common body of knowledge so needed by all, their records along with the placement tests results indicate the variation that may be made in the general program.

A student who has had three or four years of preparatory school study in any one of the subject areas of the comprehensive courses, and his placement tests or progress tests indicate superior knowledge and understanding at this level may consult one of the counsellors for subsequent needed program adjustment.

THE ASSOCIATE OF ARTS CERTIFICATE

The Associate of Arts Certificate is awarded in recognition of the successful completion of two years of planned work at the University of Florida. In specific detail, one must pass at least sixty-four semester hours including pre-professional work and the comprehensive courses that make up the core program.

PROGRAMS OF STUDY

NORMAL PROGRAM

Freshman Year	Credits
1.—American Institutions	8
2.—The Physical Sciences	6
3.—Reading, Speaking and Writing—Freshman English	8
4.—Logic and Mathematics	6
5.—Departmental Electives	2-6
Military Science; Physical Fitness	
	30-34

Sophomore Year	Credits
1.—The Humanities	8
2.—Biological Science	6
3.—Departmental Electives	16-20
Military Science; Physical Fitness	
	30-34

At least sixty-four semester hours, which may include four hours of Military Science, are required to complete the Lower Division.

Basic Program for Pre-Medical or Pre-Dental Students.—The program listed below covers the minimum pre-medical or pre-dental work prescribed by the American Medical Association or by the American Dental Association for its member schools. Since some schools require more, the student should write directly to the medical or dental school he is considering for a catalog and specific information concerning its requirements.

SUGGESTED PROGRAMS FOR PRE-MEDICAL OR PRE-DENTAL STUDENTS

I. Normal Program

Freshman Year	Credits
1.—*C-3, Reading, Speaking and Writing,—Freshman English	8
2.—C-6, Biological Science	6
3.—Chemistry 217-218, General Chemistry & Qualitative Analysis	8
4.—Biology 161-162, General Biology Laboratory	4
5.—*Ms. 105-106, Basic Mathematics	8
6.—Military Science; Physical Fitness	2
	36

*(C-41, Logic, 3 hrs, may be substituted for Ms. 106. This would reduce the total hours to 35.)

Sophomore Year	Credits
1.—C-1, American Institutions	8
2.—C-5, The Humanities	8
3.—Chemistry 301-302 Organic Chemistry	8
4.—*Biology 209-210, Comparative Anatomy and Embryology	8
5.—Language or elective	6
6.—Military Science; Physical Fitness	2
	40

*(Ps 201-202, 207-208, General Physics, 8 hrs, usually taken in the Junior Year, may be substituted for Bly 209-210 and these Biology courses may then be taken in the Junior Year.)

II. Alternative Program for Students Who Are Deficient in Mathematics or Science

Freshman Year	Credits
1.—C-3, Reading, Speaking & Writing, Freshman English	8
2.—C-4, Fundamental Mathematics and Practical Logic	6
3.—C-6, Biological Science	6
4.—Bly. 161-162, General Biology Laboratory	4
5.—Cy 121-122, General Inorganic Chemistry	8
6.—Military Science; Physical Fitness	2
	34

Sophomore Year	Credits
1.—C-1, American Institutions	8
2.—C-5, The Humanities	8
3.—Bly 209-210, Comparative Anatomy & Embryology	8
4.—*Ms. 325-327, Advanced General Mathematics	6
5.—Cy 123, Qualitative Analysis	3
6.—*Language or Elective	3
7.—Military Science; Physical Fitness	2
	38

*(Cy 331, Quantitative Analysis, 4 hrs, may be substituted for Ms. 327 and the language or elective. This would reduce the total hours to 36.)

Note: Cy 301-302, Organic Chemistry (8 hrs.) and Ps. 201-202, 207-208, General Physics (8 hrs.) will have to be taken after the Sophomore Year under this program. The program for the Junior and Senior Years are made out in consultation with a pre-medical or pre-dental adviser.

AGRICULTURE

The program for freshmen and sophomores expecting to earn a degree in the College of Agriculture should be:

a) For students intending to major in Agricultural Chemistry—

Freshman Year	Credits	Sophomore Year	Credits
1.—C-1, American Institutions	8	1.—C-5, The Humanities	8
2.—C-3, Reading, Speaking and Writing: Freshman English	8	2.—C-6, Biological Science	6
3.—*MS. 105-106, Basic Mathematics	8	3.—C-41, Practical Logic	3
4.—**CY. 217-218, General Chemistry and Qualitative Analysis	8	4.—EH. 133, Effective Writing	3
5.—Military Science; Physical Fitness	2	5.—CY. 331, Introductory Quantitative Analysis	4
	34	6.—Approved Electives	6
		7.—Military Science; Physical Fitness	2
			32

*Students not qualified for MS. 105-106 will take C-42 and C-41 during the freshman year and MS. 105-106 in the sophomore year. These students will take CY. 331 in the Upper Division.
**Students not qualified for CY. 217-218 will take C-21 and C-22.

b) For students intending to major in Agricultural Economics—

Freshman Year	Credits	Sophomore Year	Credits
1.—C-1, American Institutions	8	1.—Cy. 109-110, Elements of Chemistry	6
2.—C-6, Biological Science, or BTY. 101-102	6	2.—ATG. 211-212, Elementary Accounting	6
3.—C-3, Reading, Speaking and Writing: Freshman English	8	3.—C-5, The Humanities	8
4.—C-4 or MS. 105-106, Basic Mathematics	8	4.—AS. 201, Principles of Agricultural Economics	3
5.—Military Science; Physical Fitness	2	5.—ES. 206, Basic Economics	3
	32	6.—Electives in Agriculture or Basic Sciences	2-8
		7.—Military Science; Physical Fitness	2
			30-36

c) For students intending to major in Agricultural Education—

Freshman Year	Credits	Sophomore Year	Credits
1.—C-1, American Institutions	8	1.—C-41, Practical Logic	3
2.—C-3, Reading, Speaking and Writing: Freshman English	8	2.—C-42, Fundamental Mathematics	3
3.—C-6, Biological Science	6	3.—C-5, The Humanities	8
4.—AY. 221, General Field Crops	3	4.—BTY. 101-102, General Botany	6
5.—PY. 201, Fundamentals in Poultry Production	3	5.—CY. 109-110, Elements of Chemistry	6
6.—Military Science; Physical Fitness	2	6.—DY. 211, Principles of Dairying	3
	30	7.—HE. 212, Vegetable Gardening	3
		8.—Military Science; Physical Fitness	2
			34

d) For students intending to major in Agricultural Engineering, Agronomy, Animal Husbandry and Nutrition, Botany, Dairy Husbandry, Dairy Manufactures, Entomology, General Agriculture, Horticulture (Fruit, Vegetable and Food Technology programs), Plant Pathology, Poultry Husbandry, and Soils—

Freshman Year	Credits	Sophomore Year	Credits
1.—C-6, Biological Science, and/or BTY. 101-102	6-12	1.—C-1, American Institutions	8
2.—C-3, Reading, Speaking and Writing: Freshman English	8	2.—C-4, Logic and Mathematics	6
3.—CY. 121-122, General Chemistry	8	3.—C-5, The Humanities	8
4.—Electives in Agriculture or Basic Sciences	0-6	4.—Electives in Agriculture or Basic Sciences	6-12
5.—Military Science; Physical Fitness	2	5.—Military Science; Physical Fitness	2
	30-36		30-36

e) For students intending to major in Bacteriology (Microbiology)—

Freshman Year	Credits	Sophomore Year	Credits
1.—C-1, American Institutions	8	1.—C-5, The Humanities	8
2.—C-3, Reading, Speaking and Writing: Freshman English	8	2.—FH. or GN. 133-134, Language	6
3.—C-6, Biological Science and BLY. 161-162, Biology Laboratory or BTY. 101-102, General Botany	6-10	3.—PS. 201-202, General Physics	8
4.—*MS. 105-106, Basic Mathematics	8	4.—CY. 121-122, General Chemistry or CY. 217-218, General Chemistry and Qualitative Analysis	8
5.—Military Science; Physical Fitness	2	5.—Electives	0-4
	32-36	6.—Military Science; Physical Fitness	2
			32-36

*Students not qualified for MS. 105-106 will take C-4 first.

Some variations from these programs are desirable in the different curricula of the College. The curriculum of the department in which the student intends to major should be consulted for these details. Students planning to major in Animal Husbandry, Dairy Husbandry, or Poultry Husbandry are required to take BLY. 161-162 as corequisites with C-6 and ACY. 208. At least 64 academic hours which may include 4 hours of Military Science are required to complete the Lower Division; additional approved electives taken during the first two years may reduce the number of hours required for an Upper Division degree.

For desirable electives in Agriculture, students should consult the head of the department in which they intend to major. These electives during the first two years should be distributed so as to give some acquaintance with the different phases of Agriculture, and are limited to a single course in any one department. It is required that all students graduating in Agriculture take at least one course in each of the following departments: Agricultural Economics, Soils, either Agronomy or Horticulture, and either Animal Husbandry and Nutrition, Dairy Science or Poultry Husbandry. All such students, except those majoring in Agricultural Chemistry and Bacteriology, shall also take at least one course in Agricultural Engineering and in Entomology. Courses suitable for election in the freshman year are AG. 306, AL. 309, AY. 221, DY. 211, EY. 203, FY. 313, and PY. 201. In the sophomore year these courses may also be elected, and in addition the following: AG. 301, AS. 201, AS. 306, AY. 324, CL. 223, HE. 201, PT. 321, SLS. 301, and SLS. 302.

FORESTRY

Students planning to enter the School of Forestry should complete the respective outline of courses listed in the regular University Catalog as required for the freshman and sophomore years for the Forestry curriculum of their choice.

Those students falling below a 2.0 grade average will be considered for admittance to the School of Forestry only after they have demonstrated the ability to satisfactorily carry on the professional courses in Forestry.

ARCHITECTURE AND FINE ARTS

The University College student who plans to earn a degree in the College of Architecture and Fine Arts has one of the following basic programs:

A.—For the degree in Architecture or Building Construction—

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—Reading, Speaking and Writing: Freshman English	8	2.—Biological Science	6
*3.—MS. 105-6	8	**3.—PS. 201-2	6
4.—AE. 101-2	6	4.—AE. 203-4	6
5.—Military Science or Elective	2	5.—AE. 205-6	6
6.—Physical Fitness	0	6.—Military Science or Elective	2
		7.—Physical Fitness	0
	32		34

B.—For the degree in Landscape Architecture—

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing: Freshman English	8	3.—CL. 223	3
*4.—MS. 105	4	4.—CY. 109	3
5.—AE. 101-2	6	5.—AE. 203-4	6
6.—Military Science or Elective	2	6.—AE. 205	3
7.—Physical Fitness	0	7.—Military Science or Elective	2
		8.—Physical Fitness	0
	34		34

*Students not qualified for MS. 105-6 will take C-42 first.
**Students not qualified for PS. 201-2 will take C-22 first.

C.—For the degree in Interior Design—

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing: Freshman English	8	3.—AE. 203-4	6
4.—Logic and Mathematics	6	4.—AE. 205	3
5.—AE. 101-2	6	5.—Approved Elective	3
6.—Military Science or Elective	2	6.—Military Science or Elective	2
7.—Physical Fitness	0	7.—Physical Fitness	0
	36		28

D.—For the degree in Painting and Drawing, Commercial Art, Crafts, or History of Art.—

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing: Freshman English	8	3.—ART 124	3
4.—Logic and Mathematics	6	4.—ART 222	3
5.—ART 121	3	5.—ART 225-6	6
6.—ART 123	3	6.—Military Science or Elective	2
7.—Military Science or Elective	2	7.—Physical Fitness	0
8.—Physical Fitness	0		28
	36		

E.—For the degree in Costume Design—

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing: Freshman English	8	3.—ART 124	3
4.—Logic and Mathematics	6	4.—ART 222	3
5.—ART 121	3	5.—ART 290	3
6.—ART 123	3	6.—Approved Elective	3
7.—Military Science or Elective	2	7.—Military Science or Elective	2
8.—Physical Fitness	0	8.—Physical Fitness	0
	36		28

F.—For the degree in Music—

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Freshman English	8	3.—Military Science: Physical Fitness	2
4.—Logic and Mathematics	6	4.—EDF. 225	3
5.—Military Science: Physical Fitness	2	5.—EDF. 245	3
6.—Applied Music	2	6.—MSC. 101-102	6
7.—Ensemble	2	7.—Applied Music in Courses above 100	4
	34	8.—Ensemble	2
			34

NOTE: Before a student may be admitted to a Departmental major program in Music in the College of Architecture and Fine Arts (his junior year), he must pass a proficiency examination in Piano.

ARTS AND SCIENCES

A student who plans to earn a 4-year degree in the College of Arts and Sciences should secure credit in all of the comprehensive areas as indicated by the University College. Electives in the first two years should be taken in introductory courses in possible major fields and in foreign languages. Students who have selected a major should limit their University College electives in the major to permit taking introductory and intermediate courses in other liberal arts areas.

For information concerning special programs of instruction and the details of degree requirements the student is referred to the regular University Catalog.

BUSINESS ADMINISTRATION

To enter the College of Business Administration students are required to complete the curriculum below or the equivalent thereof in each of the courses or areas of knowledge listed including the following:

ES. 201-202—Basic Economics
ATG. 211-212.—Elementary Accounting
ES. 203.—Elementary Statistics
MS. 208.—Business Mathematics

Freshman Year

First Semester	Credits	Second Semester	Credits
1.—American Institutions	4	1.—American Institutions	4
2.—The Physical Sciences	3	2.—The Physical Sciences	3
3.—Mathematics or Logic	3	3.—Logic or Mathematics	3
4.—Reading, Speaking and Writing: Freshman English	4	4.—Reading, Speaking and Writing: Freshman English	4
5.—Approved Electives	3	5.—Approved Electives	3
Military Science; Physical Fitness	1	Military Science; Physical Fitness	1
	15-18		15-18

Sophomore Year

1.—Accounting	3	1.—Accounting	3
2.—Economics	3	2.—Economics	3
3.—The Humanities	4	3.—The Humanities	4
4.—Biological Science	3	4.—Biological Science	3
5.—Statistics or MS. 208	3-4	5.—Statistics or MS. 208	3-4
Military Science; Physical Fitness	1	Military Science; Physical Fitness	1
	17-18		17-18

At least sixty-four semester hours, which may include four hours of Military Science, are required to complete the Lower Division.

COURSES OFFERED BY THE COLLEGE OF BUSINESS ADMINISTRATION AVAILABLE TO STUDENTS IN THE UNIVERSITY COLLEGE

The following courses offered by the College of Business Administration may be taken by students in the University College: ATG. 211-212, Elementary Accounting; BS. 231, Principles of Marketing; BS. 233, Salesmanship; BS. 260, Fundamentals of Insurance; BS. 271, Principles of Management; ES. 203, Elementary Statistics; ES. 201-202, Basic Economics; ES. 208, Economic History of the United States; RE. 291, Real Estate Fundamentals; and RE. 295, Housing and Home Ownership.

EDUCATION

University College students working toward a degree in the College of Education should pursue one of the following programs:

Basic Program
(Except Agricultural Education and Education for the Exceptional Child)

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing—Freshman English	8	3.—Logic or Mathematics	3
4.—Logic or Mathematics	3	4.—Military Science or Electives	2
5.—Miltary Science or Electives	2	5.—Electives (from list below)	12
6.—Electives (from list below)	6-8	6.—Physical Fitness	0
7.—Physical Fitness	0		31
	33-35		

Electives:
Elementary Education: EDF. 245, 225; MSC. 161 (Prerequisite: MSC. 160 or pass music skills test); PHA. 361; SCA. 253.
*Secondary Education: EDF. 245, 225.
*Business Education: BEN. 81, 91, 181; EDF. 245, 225; ES. 201-02.
*Industrial Arts Education: EDF. 245, 225; IN. 102.

For the basic programs in Agricultural Education and Education for the Exceptional Child, consult the *Catalog*.

*For these areas three hours in the Human Adjustment field, other than C-41, are required. These electives may be taken either in the University College or in the College of Education.

ENGINEERING

The program for the first and second year students expecting to earn a degree in the College of Engineering is as follows:

First Semester	Credits
1.—C-11, American Institutions	4
*2.—C-21, The Physical Sciences	3
3.—C-31, Reading, Speaking, and Writing: Freshman English	4
*4.—C-42, Fundamental Mathematics	3
5.—MY. 101, Military Science	1
6.—PL. 101, Physical Fitness	0
	15

Second Semester	Credits
1.—C-12, American Institutions	4
*2.—C-22, The Physical Sciences	3
3.—C-32, Reading, Speaking, and Writing: Freshman English	4
*4.—C-41, Practical Logic	3
5.—MS. 105, Basic Mathematics	4
6.—MY. 102, Military Science	1
7.—PL. 102, Physical Fitness	0
	19

Third Semester	Credits
1.—MS. 106, Basic Mathematics	4
2.—CY. 217, General Chemistry and Qualitative Analysis	4
3.—C-51, The Humanities	4
**4.—ML. 181, Engineering Drawing	3
5.—MY. 201, Military Science	1
6.—PL. 103, Physical Fitness	0
	16

Fourth Semester	Credits
1.—MS. 353, Differential Calculus	4
2.—CY. 218, General Chemistry and Qualitative Analysis	4
3.—C-52, The Humanities	4
**4.—ML. 182, Descriptive Geometry	3
5.—MY. 202, Military Science	1
6.—PL. 104, Physical Fitness	0
	16

A student interested in the Florida Industries Cooperative Plan should contact the engineering department of his choice or the Dean's office for specific advice before registering for the first semester.

Students whose records in the University College indicate that they are qualified to take the professional courses in Engineering will be admitted to the College of Engineering.

JOURNALISM AND COMMUNICATIONS

To enter the School of Journalism and Communications students are required to have completed the six comprehensive courses; present credit in pre-professional work—COM. 118, ES. 206, and SCH. 201; have a grade average of C or better; and a working knowledge of typewriting.

Those falling below a 2.0 grade average in University College will not be considered for admittance to the School of Journalism and Communications until they have demonstrated their ability to pursue with profit professional work in the Upper Division by satisfactorily completing one semester's work prescribed by the Director of the School of Journalism and Communications.

At least sixty-four hours, which may include four hours of Military Science, are required to complete the Lower Division.

*In cases where students, on the basis of superior placement test grades, are allowed to omit starred courses, they will need to take an equivalent amount of more advanced work in order to be eligible for admission to the College of Engineering at the end of the second year.

**Drawing equipment required for ML. 181, ML. 182, and subsequent courses costs approximately thirty dollars.

Transfer students or those with a special hour-credit problem who have not completed some of the pre-professional work in University College, may be admitted provisionally to the School of Journalism and Communications on approval of the Director. They will be *expected*, however, to complete the lower-level work.

LAW

Applicants for admission to the College of Law must have received before admission a four-year baccalaureate degree from an accredited college or university except as stated in the description of the College of Law in this Catalog. No entering law students are admitted to the Summer Session.

Although no particular courses are prerequisites, a student preparing for admission to the College of Law should obtain a thorough mastery of the basic comprehensive courses and should take also at least two courses in each of the following general fields: Accounting, Economics, English, History (American and English), and Political Science. Since concepts expressed in words are tools of the legal profession, it is essential that a student be able to read rapidly and meaningfully and to write clearly and concisely. Courses requiring the rapid assimilation and digestion of written materials and courses in expository writing therefore are recommended.

PHARMACY

In keeping with the requirements of the American Council on Pharmaceutical Education, all students expecting to earn the degree of B.S. in Pharmacy must be enrolled in one or more Pharmacy courses for a minimum of three academic years or a total of twenty-seven months. This regulation applies regardless of the number of studies completed in other fields. Upon enrolling in Pharmacy courses for the first time students must sign the register in the office of the Dean of the College of Pharmacy. Students are advised to pursue the following program:

Freshman Year and Summer Session	Credits
C-11-12, American Institutions	8
C-31-32, Freshman English	8
C-41, Practical Logic	3
C-42, Fundamental Mathematics	3
C-51, The Humanities	4
C-61, Biological Science	3
CY. 121-2, General Chemistry	8
PHY. 106, Pharmaceutical Calculations	2
Military Science; Physical Fitness	2
Total	41

Sophomore Year	Credits
C-52, The Humanities	4
C-62, Biological Science	3
PS. 201-2, General Physics	6
PS. 207-8, General Physics Laboratory	2
PGY. 221-2, Practical Pharmacognosy	6
PHY. 223-4, Galenical Pharmacy	6
CY. 123, Qualitative Analysis	3
CY. 331, Quantitative Analysis	4
Military Science; Physical Fitness	2
Total	36

Only students having an average of C or higher will be admitted to the College of Pharmacy and/or pharmacy courses in the Upper Division. In addition, all pre-pharmacy students must have grades of C or higher in each of the following courses: C-42, CY. 121, CY. 122, PGY. 221, PGY. 222, PHY. 106, PHY. 223, and PHY. 224.

PHYSICAL EDUCATION AND HEALTH

University College students expecting to earn a degree in the College of Physical Education and Health should pursue one of the following programs:

A.—For men intending to major in Physical Education—

Freshman Year	Credits
C-11-12.—American Institutions	8
C-31-32.—Reading, Speaking and Writing	8
C-41-42.—Logic and Mathematics	6
PHA. 284.—Team Games for Men	2
PHA. 287.—Gymnastics for Men	2
PHA. 291.—Principles of Physical Education	3
Military Science; Physical Fitness	2
	31

Sophomore Year	Credits
C-21-22.—The Physical Sciences	6
C-51-52.—The Humanities	8
C-61-62.—Biological Science	6
PHA. 251.—Folk, Social and Tap Dance	2
PHA. 283.—Track and Baseball	2
EDF. 245.—Aspects of Human Growth and Development	3
Approved Electives	4
Military Science; Physical Fitness	2
	33

B.—For women intending to major in Physical Education—

Freshman Year	Credits
C-11-12.—American Institutions	8
C-31-32.—Reading, Speaking and Writing	8
C-41-42.—Logic and Mathematics	6
PHA. 251.—Folk, Social and Tap Dance	2
PHA. 253.—Team Sports for Women	2
PHA. 255.—Individual and Dual Sports for Women	2
PHA. 257.—Gymnastics for Women	1
PHA. 291.—Principles of Physical Education	3
Physical Fitness	0
	32

Sophomore Year	Credits
C-21-22.—The Physical Sciences	6
C-51-52.—The Humanities	8
C-61-62.—Biological Science	6
PHA. 252.—Modern Dance	1
PHA. 254.—Team Sports for Women	2
PHA. 256.—Swimming and Diving for Women	1
PHA. 258.—Tennis and Golf for Women	2
EDF. 245.—Aspects of Human Growth and Development	3
Approved Electives	3
Physical Fitness	0
	32

C.—For men and women intending to major in Health Education—

Freshman Year	Credits
C-11-12.—American Institutions	8
C-31-32.—Reading, Speaking and Writing	8
C-41-42.—Logic and Mathematics	6
EDF. 245.—Aspects of Human Growth and Development	3
PHA. 261.—Personal Hygiene	3
Approved Electives	2
Military Science or Electives	2
Physical Fitness	0
	32

Sophomore Year	Credits
C-51-52.—The Humanities	8
C-61-62.—Biological Science	6
*CY. 121-122.—General Chemistry	8
SY. 201.—Sociological Foundation of Modern Life	3
EDF. 225.—Children and Culture	3
SY. 244.—Marriage and the Family	3
Military Science or Electives	1
Physical Fitness	0
	32

*Students planning to major in Health Education must take CY. 121-122. Students whose high school records and placement tests indicate satisfactory preparation may substitute CY. 121-122 for C-21-22. Others should take C-21, upon satisfactory completion of which they may enter CY. 121.

D.—For men and women intending to major in Recreation—

Freshman Year	Credits
C-11-12.—American Institutions	8
C-31-32.—Reading, Speaking and Writing	8
C-41-42.—Logic and Mathematics	6
PHA. 284.—Team Games for Men or PHA. 253.—Team Sports for Women	2
PHA. 255.—Individual and Dual Sports for Women	2-0
EDF. 245.—Aspects of Human Growth and Development	3
Military Science or Electives	3-5
Physical Fitness	0
	32

Sophomore Year	Credits
C-21-22.—The Physical Sciences	6
C-51-52.—The Humanities	8
C-61-62.—Biological Science	6
PHA. 251.—Folk, Social and Tap Dance	2
SY. 201.—Sociological Foundation of Modern Life	3
IN. 330.—Elementary School Handicrafts	3
PHA. 283.—Track and Baseball or PHA. 258.—Tennis and Golf for Women	2
Military Science or Electives	2
Physical Fitness	0
	32

E.—For men and women intending to major in Physical Therapy—

Freshman Year	Credits
C-11-12.—American Institutions	8
C-31-32.—Reading, Speaking and Writing	8

Sophomore Year	Credits
*CY. 121-122.—General Chemistry	8
C-51-52.—The Humanities	8
PHA. 295.—Introduction to Physical	

C-41-42.—Logic and Mathematics	6
C-61-62.—Biological Science	6
BLY. 161-162.—Biology Laboratory	4
Military Science or Electives	2
Physical Fitness	0
	34

Therapy	2
PSY. 201.—General Psychology	3
PSY. 205.—Social Psychology or PSY. 202.—Personality Development or PSY. 211.—Psychological Measurement	3
Approved Electives	6
Military Science or Electives	2
Physical Fitness	0
	32

*Students planning to major in Physical Therapy must take CY. 121-122. Students whose high school records and placement tests indicate satisfactory preparation may substitute CY. 121-122 for C-21-22. Others should take C-21, upon satisfactory completion of which they may enter CY. 121.

SCHOOLS AND COLLEGES OF THE UPPER DIVISION

COLLEGE OF AGRICULTURE

The College of Agriculture is composed of three units, namely, 1. Instruction, 2. Research (Agricultural Experiment Station), and 3. Extension (Agricultural Extension Service). The Instructional Division (the College proper) is made up of departments in the College devoted to the various phases of technical and practical agricultural work. The work of these departments is closely related, and the aim of the College is to afford students the best possible training for service in agriculture.

The departments in the College are: Agricultural Chemistry, (administered jointly with the College of Arts and Sciences), Agricultural Economics, Agricultural Engineering, Agricultural Education (administered jointly with the College of Education), Agronomy, Animal Husbandry and Nutrition, Bacteriology, Botany, Dairy Science, Entomology, Horticulture, Plant Pathology, Poultry Husbandry, Soils, and Veterinary Science.

COLLEGE OF ARCHITECTURE AND FINE ARTS

The College of Architecture and Fine Arts offers programs of study leading to appropriate undergraduate degrees in Architecture, Building Construction, Interior Design, Landscape Architecture, Painting and Drawing, Commercial Art, Crafts, Costume Design, History of Art, and Music. Programs at the graduate level are offered in Architecture, in Art, in Building Construction, and in Community Planning.

The College offers courses to students in other colleges of the University who wish to broaden their cultural background in the arts.

1957 SUMMER SESSION

During the 1957 Summer Session the College will offer a selected group of undergraduate courses in Architecture, Art, Building Construction, and Music, as well as graduate courses in Architecture, Art, and Building Construction.

TEACHERS' CERTIFICATE

The College of Architecture and Fine Arts offers courses leading to certification in Art and Music for teaching in the elementary and secondary schools in the State of Florida. Regulations describing certification of teachers are published by the State Department of Education and it is imperative that all stu-

dents who expect to be certified familiarize themselves with these regulations. Applications for certificate should be made immediately after graduation, and should be addressed to the State Superintendent of Public Instruction.

DEGREES AND CURRICULA

For detailed information on admission, undergraduate degrees, graduate degrees, and programs of study for the various curricula, see the University Catalog.

COLLEGE OF ARTS AND SCIENCES

The subject matter fields regularly offered to students in the College of Arts and Sciences and the extent of these offerings is indicated in the table below:

Subject	Elective Work	Group Major	Dept. Major	MA. or MS.	Ph.D.
Anthropology	X	X	X	—	—
Art	X	X	X	Graduate work offered through College of Architecture and Fine Arts	
Astronomy	X	X	—	—	—
Bacteriology	X	X	X	Graduate work offered through College of Agriculture	
Biology	X	X	X	X	X
Botany	X	X	X	Graduate work offered through College of Agriculture	
Chemistry	X	X	X	X	X
Communications	X	Major and graduate work offered in the School of Journalism and Communications			
Economics	X	X	X	Graduate work offered through College of Business Administration	
Education	X	Major and Graduate work offered through the College of Education			
English	X	X	X	X	X
Family Life	X	X	—	—	—
French	X	X	X	X	—
Geography	X	X	X	X	X
Geology	X	X	X	X	—
German	X	X	X	X	—
Greek	X	X	X	—	—
History	X	X	X	X	X
Journalism	X	Major and Graduate work offered through the School of Journalism and Communications			
Latin	X	X	X	X	—
Library Science	X	X	—	—	—
Mathematics	X	X	X	X	X
Meteorology	X	—	—	—	—

Music	X	X	X	—	—
Philosophy	X	X	X	X	—
Physics	X	X	X	X	X
Political Science	X	X	X	X	X
Psychology	X	X	X	X	X
Religion	X	X	X	—	—
Russian	X	X	—	—	—
Sociology	X	X	X	X	X
Spanish	X	X	X	X	X
Speech	X	X	X	X	X
Zoology	See Biology listed above				

For information regarding details of these programs of study and degree requirements, the University catalog for 1957-58 should be consulted.

COLLEGE OF BUSINESS ADMINISTRATION

The summer session offerings of the College of Business Administration provide basic courses in the several curricula groupings, a selection of advanced courses to enable students to go ahead with a normal academic program and a selection of graduate courses.

A number of curricula leading to the degree of Bachelor of Science in Business Administration are offered. For complete information on the requirements for these curricula and for the graduate program, the University Catalog should be consulted.

COLLEGE OF EDUCATION

REQUIREMENTS FOR ADMISSION

For admission to the College of Education students will present a certificate of graduation from the University College, or equivalent, and have the approval of the Admissions Committee of the College of Education. (See General Catalog for detailed requirements).

UNDERGRADUATE PROGRAMS

Students who are preparing to teach have the opportunity of specializing in the following teaching areas: agricultural education, art, business education, elementary education, English, foreign languages, health education, industrial arts education, mathematics, physical education, sciences, and social studies. (See General Catalog for curricula. For further information, consult the Undergraduate Counseling Office, Yonge 140.)

GRADUATE PROGRAMS

Graduate work in Education offers an opportunity for teachers to specialize in such areas as foundations of education (educational psychology, history and philosophy of education, human growth and development), elementary education, secondary education, agricultural education, business education, industrial arts education, school administration, supervision, audio-visual education, guidance, junior college education, teacher education, educational research, rehabilitation

counseling, and education for the exceptional child. (See General Catalog for requirements.)

NOTE: Orientation Meeting for *all* graduate students in Education, Thursday, June 20, 7:00 P.M., in Yonge Auditorium. This meeting will be devoted to a discussion of policies and programs for graduate students in the College of Education.

CERTIFICATION OF TEACHERS

The curricula in the College of Education include State certification requirements. Each student should consult his counselor to plan a sequence of courses to meet requirements for his degree and for certification.

For further information concerning the certification of teachers, write to the State Department of Education, Tallahassee, Florida, requesting *State Board Regulations Relating to Florida Requirements for Teacher Education and Certification*, April 3, 1951, revised July 21, 1953.

EXTENSION OF CERTIFICATES

The following more important items govern the extension of certificates:

1. The certificate must be valid at the close of the summer term attended and at the time formal application for extension is made.

2. The applicant must pass at least six semester hours in which no grade is below C.

3. Students who desire an extension of certificate should obtain an official application blank at the Office of Graduate Studies or the Undergraduate Counseling Office and should apply for a transcript of Summer School credits at the Office of the Registrar, Room 33, Administration Building, prior to July 10.

4. Certificates to be extended, together with the Summer School transcript and the completed application blank, must be sent by registered mail to Mr. T. D. Bailey, State Superintendent of Public Instruction, Tallahassee, Florida, within a year after the close of the Summer term.

EDUCATIONAL PLACEMENT OFFICE

The Educational Placement Office serves both former students of the University and public school officials, without charge. The Office keeps up-to-date records on registrants for positions and a current list of educational administration and teaching vacancies. Persons who wish this service should communicate with the Educational Placement Office, Yonge 140.

THE P. K. YONGE LABORATORY SCHOOL

The summer term of the Laboratory School will extend from June 18 through July 26. Children of Summer Session students and all others are eligible for enrollment. Classes from the kindergarten through the sixth grade will be held. The fees are $2. for University registration $5. for expendable materials.

Parents will register pupils Monday, June 17, 3:00 to 5:00 p.m. in the first floor hall of the elementary wing of the Yonge building. Teacher-parent conferences will be held on Monday, June 17, and parents should not be accompanied by their children.

Application for admission should be made at the Laboratory School Office, 218 Yonge Building, as soon as possible since the number who may be admitted is limited.

EDUCATION CLASS IN EXCEPTIONAL CHILD EDUCATION

Through the cooperation of the Alachua County public schools and the P. K. Yonge Laboratory School, a demonstration class is provided for teachers interested in observing work with slow learning children. Observations may be scheduled at Room 120 P. K. Yonge.

COLLEGE OF ENGINEERING

UNDERGRADUATE PROGRAMS

Students who contemplate registration in the College of Engineering and those who are already registered in this college should confer about their schedules with the department heads and the dean as soon as possible.

The College of Engineering is offering several courses during the Summer Session in various departments so that students may graduate in a minimum time. Many other courses included in the engineering curricula, such as mathematics and physics, are also available. During the summer months the engineering student may also take subjects to meet elective requirements.

A student in the College of Engineering desiring to elect the Nuclear Option must confer with his department head before arranging his registration.

Students entering the University for the first time may find it to their advantage to enroll in mathematics and one of the following: Freshman English, American Institutions or General Chemistry. Students who have completed one year at the University may take courses in calculus and physics. Statics, dynamics, or strength of materials is suggested for those students who have completed calculus and physics. Elective subjects in mathematics, physics and the humanities are recommended to all students.

GRADUATE PROGRAMS

The graduate programs offered by the College of Engineering are continued during the summer in order to allow students already enrolled to complete their graduate work in a minimum length of time.

FORESTRY

Courses in Forestry are offered during the Summer Session. The required Summer Camp should be taken between the second and third year's work provided the necessary prerequisites have been completed. Students who contemplate registration in the School of Forestry should consult the University Catalog for courses which are prerequisites or are required in the Forestry curriculum.

SCHOOL OF JOURNALISM AND COMMUNICATIONS

A UNIT OF THE COLLEGE OF ARTS AND SCIENCES

The curricula in the School of Journalism and Communications lead to the degree Bachelor of Science in Journalism or Bachelor of Science in Communications.

The programs provide students with a broad background in liberal arts and sciences—literature, economics, history, political science, sociology, psychology—which are vital aspects of contemporary life and essential to those entering professional careers in printed media or audio-visual media of communications.

The general plan of education in this School is arranged so that the student spends about three-fourths of his time on general background courses. The remaining fourth involves the acquisition and practice of professional techniques in relation to this background knowledge.

Students entering the School of Journalism must choose one of the programs of study.

Those majoring in the Editorial and Public Relations fields will take the Journalism program and earn the BSJ degree. Two degrees are offered in the Advertising program: those interested in printed media will earn the BSJ degree, and those specializing in audio-visual media will earn the BSCOM degree. Students interested in Radio-TV will register for the Communications program and earn the BSCOM degree.

COLLEGE OF LAW

1. The beginning courses in Law are not offered in the Summer Session, hence students are not admitted in June unless they have completed satisfactorily at least one semester of work in an accredited law school.
2. A student wishing to transfer from another accredited law school who, at the time of beginning his study of law, qualified for admission to this College under the stated requirements for beginning students (other than the Law School Admission Test) and who has maintained a scholastic average of C or higher on all previous law school work undertaken, may apply for admission with advanced standing. Courses completed with a grade of C or higher in other accredited law schools will be accepted for credit up to but not exceeding a total of thirty hours.
3. Applicants for admission must have received before admission a 4-year baccalaureate degree from an accredited college or university, except in the case of veterans, who will be admitted after they have completed 94 hours of satisfactory work in an accredited college or university if they have maintained a scholastic average of C or higher on all work undertaken.

COLLEGE OF NURSING

The College of Nursing has a four-year basic program leading to the degree Bachelor of Science in Nursing. Students in this program are required to take all of the comprehensive courses during their first two years along with beginning courses in nursing. The junior and senior years will consist largely of nursing courses, plus some recommended electives in the junior year. Graduate nurses who are interested in obtaining the B.S.N. will take the same general education courses as basic students as well as advanced clinical courses. Further details about the program may be obtained from the College of Nursing.

COLLEGE OF PHARMACY

The Summer Session offerings of the College of Pharmacy, a unit in the J. Hillis Miller Health Center, provide three courses in the Lower Division, several

courses in the Upper Division, and one graduate course. In addition, graduate students will be given guidance in research leading to the M.S. and Ph.D. degrees.

For complete description of the courses and requirements for admission and graduation the student should consult the University Catalog.

COLLEGE OF PHYSICAL EDUCATION AND HEALTH

GENERAL STATEMENT

The College of Physical Education and Health offers programs of instruction and services under five departments, namely, Health Service, Intramural Athletics and Recreation, Required Physical Education for Men, Required Physical Education for Women, and The Professional Curriculum.

THE PROFESSIONAL CURRICULUM

ADMISSION REQUIREMENTS

For admission to the College of Physical Education and Health students must present a certificate of graduation from the University College, or the equivalent, and have the approval of the Admissions Committee of the College of Physical Education and Health. (Consult the University *Catalog* for detailed requirements).

UNDERGRADUATE DEGREES

The College of Physical Education and Health offers four undergraduate degrees: The Bachelor of Science in Physical Education, The Bachelor of Science in Health Education, The Bachelor of Science in Recreation, and The Bachelor of Science in Physical Therapy. For complete information concerning the several curricula and the requirements for these degrees, the University *Catalog* should be consulted.

GRADUATE DEGREE

Courses are offered by this College in the Graduate School leading to the degree of Master of Physical Education and Health with a major in physical education. Admission and degree requirements for graduates of accredited institutions are described under the Graduate Division section of this *Catalog.*

THE GRADUATE DIVISION

THE GRADUATE SCHOOL

ADMINISTRATION

The Graduate School consists of the Dean, the Graduate Council, and the Graduate Faculty. It is responsible for the establishment and enforcement of minimum general standards of graduate work in the University and for the coordination of the graduate programs of the various colleges and divisions of the University. The responsibility for the detailed operation of graduate programs is vested in the individual colleges and divisions.

ADMISSION

Application for admission to the Graduate School must be made to the Director of Admissions on forms supplied by his office and at times stipulated in the University Calendar. Applications are referred by the Director to the graduate selection committee of the various colleges and divisions for approval or disapproval. No transcript will be accepted as official unless it is received directly from the registrar of the institution in which the work was done.

In general, no student who is a graduate of a non-accredited institution will be considered for graduate study in any unit of the University.

Members of the faculty of the University of Florida with a rank of assistant professor or above (or equivalent) may not receive a graduate degree from this institution. They may, however, register for work in the Graduate School and apply the credit earned to graduate degrees to be conferred by other institutions.

Grade Standards.—Except as noted below, unqualified admission to the Graduate School is dependent upon presentation of an undergraduate record from an accredited college or curriculum with an average grade of "B" from the junior and senior years. In some units of the Graduate School and on the more advanced levels of graduate study, an undergraduate average considerably above "B" may be required.

If the student's undergraduate grades do not meet the standard for unqualified admission, he may in exceptional cases be granted qualified admission as a fifth-year student by the college of his choice. In this status he will be given a program of about 15 semester hours consisting of advanced undergraduate courses and no more than 6 semester hours of graduate courses. Upon completion of this program with an average grade of "B" or better, the student will be given unqualified admission to the Graduate School. Up to 12 hours of the trial program may be credited to his graduate record. The trial program will not be continued beyond the originally planned period.

Admission to programs leading to degrees of Master of Arts in Education, Master of Education and Master of Physical Education and Health (for a graduate of an accredited college) may be granted on either of the following bases:

1. A 2.5 honor-point average, as calculated at the University of Florida, for the last two years of undergraduate work including at least 60 semester hours, and a satisfactory score on the Graduate Record Examination—Scholastic Aptitude Test.
2. A student with less than a 2.5 honor-point average in his last two years of undergraduate work may inquire as to the possibility of registering as a fifth-year student if he has presented satisfactory scores on the Graduate Record Examinations-Scholastic Aptitude Test. Upon completion of 15 semester hours of a planned and approved trial program with an honor-point average of 3.0 or above the student may be admitted for study toward the master's degree. Not more than 9 semester hours of this trial program may be taken in courses numbered 600 and above. If the student makes an honor-point average of 3.0 or above, upon the approval of the Graduate Committee of the College, up to 15 semester hours of his trial program program may be credited to his graduate record.

In the College of Agriculture, admission to graduate study is normally limited to those students who have maintained at least a 2.5 honor-point average in their upper-division work and 3.0 in their major subject. For students with an under-

graduate major in general agriculture, the minimum upper-division average is 2.75. In exceptional cases, where a candidate has demonstrated in some other way his fitness to do graduate work, as, for instance, outstanding achievement since earning the bachelor's degree, he may be considered for admission.

Graduate Record Examinations Required for Admission.—Admission to the Graduate School is dependent upon the undergraduate record, upon other evidence of ability, and upon the scores obtained on the Graduate Record Examinations. Each applicant for admission must submit scores on the aptitude test of the GRE, but either at the request of the department concerned or on his own volition the applicant may submit the score on one or more advanced subject-matter tests of the GRE. The scores on all tests taken will be weighed in regard to admission. The GRE scores will also be given consideration at a later date along with the graduate scholastic record when the student applies for admission as a candidate for an advanced degree.

The Graduate Record Examinations are given four times a year—in November, January, May and July at a great many locations in the United States including Gainesville, Florida. To determine exact dates and the most convenient location, the student should write to Educational Testing Service, Princeton, New Jersey. Applications are required several weeks ahead of the examination and scores are received about a month after the examination. Hence it is necessary to apply for the GRE in early October if admission is desired in February, in early April for admission to the summer session, and in early June for admission in September. Undergraduates are advised to take the Graduate Record Examinations in January or May if admission to the Graduate School is desired for the following September.

Students educated in foreign countries and applying for admission while residing outside the United States may be given a postponement and permitted to take the GRE after initial registration at the University of Florida.

Undergraduate Registration for Graduate Credit.—An undergraduate student at the University of Florida who has less than one semester of course work to complete for the bachelor's degree may request, in writing, through the dean of his college, approval by the Dean of the Graduate School of course registration eligible for graduate credit. Such approval can be given only to students who have maintained a "B" average in the upper division and whose total proposed program does not exceed 15 semester hours in a single regular semester or 6 hours in a summer term. Commonly, courses to be approved should be of full graduate caliber; approval of an advanced undergraduate course will be restricted to one not normally a part of the undergraduate program prerequisite to the graduate studies to be undertaken. For application to a specific advanced degree the course work taken must be earned with a grade of "A" or "B" and be recommended for transfer to the student's graduate record by his supervisory committee after he has been admitted to the Graduate School. Courses beyond the requirement of the bachelor's degree which are taken without such approval are not eligible for transfer as graduate credit. Foundation work required for a change of major must be taken without graduate credit.

Consultation with College and Department.—After the student has been admitted to the Graduate School but before his first registration, he should consult the college and department in which he will do his work concerning course requirements, deficiencies, if any, the planning of a program, special regulations,

etc. All registrations require the signature of the dean of the college in which the degree is to be awarded or of his representative.

GENERAL REGULATIONS AND INSTRUCTIONS

Student Responsibility.—It is the responsibility of the student to inform himself concerning, and to carry out, all regulations and procedures required by the course he is pursuing. In no case will a rule be waived or an exception granted because a student pleads ignorance of the rule or asserts that he was not informed of it by his adviser or other authority.

Loads.—The maximum *full-time registration* in a single regular semester is 15 semester hours; the minimum is 12 semester hours. Part-time employment of any kind reduces the maximum study load permitted. One-third time graduate assistants with departmental duties of 15 hours per week may register for a maximum of 12 semester hours. One-half time graduate assistants with departmental duties of 20 hours per week may register for a maximum of 10 semester hours. Full-time employees of the University may register for one graduate course of no more than 4 semester hours or for two courses totaling no more than 6 semester hours, if one of the two courses is a thesis course. Full-time public school personnel are normally registered for a single course.

During the *summer session,* full-time registration for a candidate for a thesis degree is 6 to 8 semester hours; full-time registration for a student in a non-thesis master's program or an Ed.S. program is 9 semester hours. A graduate assistant may not exceed 6 semester hours, and a full-time employee is limited to one course or 3 semester hours. These regulations apply to the eight-week summer term.

Holders of fellowships and assistantships are required to register for graduate study programs commensurate with the study time permitted by their awards and in no case less than 6 semester hours.

Courses and Credits.—(1) Courses numbered 500 and above are for fifth-year or other advanced undergraduate programs. Regulations as to the use of these courses in graduate programs, grading, and minimum class size will be the same as for courses in the 400 category. (2) Courses numbered 600 and above are limited to graduate students. (3) Courses numbered 700 and above are graduate courses primarily for advanced graduate students.

For the purpose of graduate study, undergraduate courses numbered 300 and above are acceptable for minor study when taken as a part of an approved graduate program. Individual undergraduate courses in the 500 category, or comparable courses from the 400 category which have been approved for graduate study by the Graduate Council, may be used as a part of the major study. However, in such cases, fifty per cent of the minimum course requirements must be in courses designated for graduate students only.

A complete list of approved graduate courses appears in the section of this Catalog entitled Departmental Courses. Departments reserve the right to decide which of these graduate courses will be given in any semester or summer session. The published Schedule of Courses does not always include all graduate courses offered; the departments, therefore, should be consulted concerning available courses.

Grades,—Passing grades for graduate students in courses numbered below 600 are "A" and "B." Passing grades in courses numbered 600 and above are

"A," "B," and "C"; however, "C" grades in courses numbered 600 and above count toward a graduate degree only if an equal number of credit hours in courses numbered 600 and above are earned with a grade of "A."

Admission to candidacy for a graduate degree and the award of such degree depends (among other requirements) upon maintenance of an average grade of "B" for all work attempted in the major and minor fields. Any grade of "I" (incomplete) in the fields of the major and minor (or minors) must be removed by completing all required work, unless an honor-point average of 3.0 is maintained, including the hours of incomplete courses. Grades in courses numbered 699 and 799 are not considered under this requirement.

Change of Major.—Graduate students already admitted for work in one department who wish to transfer to another department must apply for transfer through the office of the dean of their college and must have their credentials approved by the graduate selection committee having jurisdiction in the new department. The Dean of the Graduate School and the Registrar must be notified in writing of the change in the major field. The student will be required to make up, without graduate credit, any undergraduate deficiencies in the new area.

Correspondence and Extension Work.—No courses may be taken for graduate credit by correspondence, and, except in the case of the Master of Arts in Education and the Master of Education degrees, no courses may be taken for graduate credit by extension. In the case of the degrees mentioned, 6 semester hours of authorized extension graduate course work may be taken in the University of Florida for both course and residence credit; extension work taken at another institution (except Florida State University) may not be transferred to the University of Florida for graduate credit of any kind.

Fees.—The fees which graduate students must pay are listed in the section of the Catalog entitled *Expenses.* (See Table of Contents.)

Procedures for Final Semester.—At this stage it is more than usually important for the student to inform himself concerning deadline dates as set forth in the University Calendar and in the announcements issued by the Dean of the Graduate School, and the officials of his college, division, or department.

Early in the last semester the student should make formal application to the Registrar for his degree. When his thesis is ready to be put in final form he should get instructions from the office of the Dean of the Graduate School. He must arrange through the University Bookstore for proper academic costume to be worn at Commencement.

Normally, students in the Graduate School must be registered in the University at the time they receive a degree. If, however, a student has completed all requirements for his degree, including courses, residence, thesis or dissertation, and all examinations, at the time of registration for the semester in which his degree is to be awarded, the Graduate Council will consider a petition to waive this regulation. *In brief, a student must be registered for the semester in which his final examination is given.*

Other Dates.—The student must observe the regulations and dates for satisfying the *language requirements* and for applying for *admission to candidacy* for the degree sought.

DEGREES OFFERED

Non-Thesis Degrees

Master of Agriculture, with major in any field in Agriculture
Master of Education, with major in any field in Education, including Business Education, and Industrial Arts Education

Master of Physical Education and Health
Master of Rehabilitation Counseling
Specialist in Education

Thesis Degrees

Master of Business Administration, with major in one of the following:

- Accounting
- Business Organization and Operation
- Real Estate

Master of Science in Agriculture, with major in one of the following:

- Agricultural Economics
- Agricultural Education
- Agricultural Engineering
- Agronomy
- Animal Husbandry
- Bacteriology
- Botany
- Dairy Science
- Entomology
- Horticulture
- Plant Pathology
- Poultry Husbandry
- Soils

Master of Science in Building Construction
Master of Science in Community Planning
Master of Science in Engineering, with major in one of the following:

- Aeronautical Engineering
- Chemical Engineering
- Civil Engineering
- Electrical Engineering
- Engineering Mechanics
- Industrial Engineering
- Mechanical Engineering

Master of Science in Forestry
Master of Science in Pharmacy, with major in one of the following:

- Pharmaceutical Chemistry
- Pharmacognosy
- Pharmacology
- Pharmacy

Master of Science, with major in one of the following:

- Bacteriology
- Biology (Zoology)
- Botany
- Cancer Research
- Chemistry
- Entomology
- Geography
- Geology
- Mathematics
- Physics
- Plant Pathology
- Psychology

Master of Fine Arts, with major in one of the following:

- Painting and Drawing
- Crafts

Master of Arts in Architecture, with major in one of the following:

Architectural Design
Building Construction

Master of Arts in Education, with major in one of the following:

Agricultural Education
Business Education
Educational Administration
Elementary Education
Foundations of Education
Guidance
Industrial Arts Education
Secondary Education

Master of Arts, with major in one of the following:

Communications
Economics
English
French
Geography
Geology
German
History
Inter-American Area Studies
Journalism
Latin
Mathematics
Philosophy
Political Science
Psychology
Sociology
Spanish
Speech

Doctor of Education

Doctor of Philosophy, with major in one of the following:

Agricultural Economics
Agronomy
Animal Husbandry
Bacteriology
Biology (Zoology)
Cancer Research
Chemical Engineering
Chemistry
Civil Engineering, including
  Sanitary Engineering
  Structural Engineering
Economics
Economics and Business Administration, including
  Accounting, Business Organization and Operation, Real Estate
Electrical Engineering
English
Geography
History
Horticulture
Inter-American Area Studies
Mathematics
Pharmacy, including
  Pharmaceutical Chemistry
  Pharmacognosy
  Pharmacology
  Pharmacy
Physics
Plant Pathology
Political Science
Psychology
Sociology (Latin American)
Soils
Spanish
Speech

THE MASTER'S DEGREE

Residence.—For any master's degree the student must spend at least one full-time academic year, or equivalent, as a graduate student at the University of Florida.

If the work for the master's degree is done entirely in the summer, full-time study during four eight-week sessions will satisfy the residence requirement. This

requirement may be reduced to (but not below) three eight-week summer sessions by transfer of work from another institution or by use of extension or other non-resident credit where accepted by the college concerned and by the Graduate Council.

Transfer of Credits.—Courses of full graduate level to the extent of 6 semester hours may be transferred from an institution approved for this purpose by the Graduate School. Acceptance of transfer credit requires approval of the student's supervisory committee and the Graduate Council. Non-resident or extension work taken at another institution (with the exception of Florida State University) may *not* be transferred to the University of Florida for graduate credit.

Time Limit.—All work for the master's degree must be completed within seven years from the time of first registration.

MASTER'S DEGREE WITHOUT THESIS

MASTER OF EDUCATION

Description and Purpose.—This degree is designed for the professional preparation of teachers, rather than for research. The program has been planned to develop in public school workers a wide range of essential abilities and to give a broad background of advanced general education, rather than to encourage narrow specialization. While not neglecting to add to qualifications already attained, it further aims at overcoming weaknesses in a student's development.

The Master of Education program seeks to develop the student in:

1. An understanding of the nature of the individual and the learning process;
2. An understanding of the purposes, issues, and trends of education in American democracy;
3. An understanding of the social realities of our time and how these condition the educative process;
4. A comprehensive, internally consistent pattern of values in keeping with our democratic traditions; a value-system which the student can apply where issues are concerned;
5. A personal philosophy of education which he can make explicit and which is consistent with his value patterns;
6. The ability to think and act creatively and adequately within his area of specialization or field of work, to see new problems, to work out solutions, and the ability to communicate to others the results of his thinking and acting.

Transfer of Credits.—If recommended in advance by the Graduate Committee and approved by the Dean of the Graduate School, a student may be permitted to study in other institutions to the extent of (but not to exceed) 6 semester hours. No graduate credits earned prior to admission to the University may be transferred without special recommendation of the Graduate Committee and the approval of the Graduate Council. No more than 6 semester hours of credit may be thus transferred.

Work Required.—Instead of having a fixed requirement of majors and minors, each student will be required to submit a plan of study which shows acceptable balance and direction. The planned program is approved by the student's counselor, with whose assistance the plan is first developed, then by the Education department head concerned and the Office of Graduate Studies in Education. If the filing of a plan is delayed the student faces the possibility that some work completed may not be accepted toward meeting degree requirements. After the program has been developed, any changes must be requested in writing and similarly approved.

The minimum course requirement is 36 semester hours, of which not more than 9 may be taken in any summer term (6 in six weeks, 3 in three weeks), and not more than 15 in any one semester. Six semester hours of workshop or extension courses may be allowed and will count as resident credit.

At least 50 per cent of the minimum course requirements shall be from courses numbered 600 and above.

Courses designated as field laboratory courses may be taken to the extent of 6 semester hours of credit. It should be noted, however, that the University imposes a limit of 12 hours of credit in the aggregate on work allowed from (1) off-campus workshops and extension courses, (2) field laboratory courses, and (3) courses transferred from other institutions.

Where the student has had no previous work in professional courses in Education he must complete a minimum of 36 hours of professional work in Education, including work at the graduate and undergraduate level, in order to qualify for this degree. Students planning to take work in closely related fields should consult their counselors as to the acceptability of such work toward meeting this requirement. In general, a minimum of 12 semester hours outside the field of Education is required.

A thesis is not required.

A reading knowledge of a foreign language is not required, but correct and effective use of the English language is expected of all candidates. Admission to the work of this program is not a guarantee that the student will be admitted to candidacy for the degree.

Admission to Candidacy.—The faculty makes a determination as to the competence of the student at the time of his admission to candidacy. Admission to candidacy for the Master of Education degree may be recommended to the Graduate Council by the Graduate Committee of the College of Education on the basis of an unassembled examination to be given at the end of from 12 to 18 semester hours of graduate work at the University of Florida. The unassembled examination is evaluated by a committee of the faculty, which may recommend supplementary oral and/or written examinations for students whose admission to candidacy is in doubt.

The unassembled examination includes: (1) the student's academic record to date, (2) the student's scores on the *Graduate Record Examination* (3) evidence of competency in the use (oral and written) of the English language, (4) evaluation of personal qualities and promise of professional attainment by persons to whom the applicant's record is known, (5) the student's experience record, and (6) any other appropriate information.

The unassembled examination is administered through the Office of Graduate Studies in Education for the Graduate Committee. The office must receive these

materials early in the term preceding that in which graduation is expected.

The student's remaining program of study will be planned in terms of needs as revealed in the Admission to Candidacy Examination. On approval of the Graduate Committee, the candidate will be recommended for the degree upon the satisfactory completion of the designated course work. The faculty reserves the right to review the student's entire record before recommending graduation.

The candidate must have completed at least one year of teaching (or the equivalent) prior to taking the last 6 semester hours of work, or must have included in his record the satisfactory completion of an internship program or a minimum of 6 semester hours of student teaching.

The Graduate Committee of the College of Education.—A special counselor is appointed for each student in the Master of Education program. His work is under the general supervision of the Graduate Committee in the College of Education. The program is administered through the Office of Graduate Studies in Education.

MASTER OF AGRICULTURE

The degree of Master of Agriculture is designed for those students who wish additional training before entering business occupations or professions, rather than for those interested primarily in research. The basic requirements, including those for admission, residence, supervisory committee, plan of study and admission to candidacy, are the same as for the Master of Science in Agriculture degree, as outlined elsewhere, but the work requirements are made to conform to the specific objectives of this degree.

Work Required.—A minimum of 36 semester hours of course work is required, at least 18 of which shall be designated strictly for graduates. Each student's program is designed to take into account the qualifications and needs of the individual and is subject to the approval of the supervisory committee. A thesis is not required, but the student must submit reports, term papers, and records of work accomplished. A *comprehensive written qualifying examination,* given by the supervisory committee is required before the beginning of the second semester of work. Failure to qualify in this examination will result either in the student's elimination from the program or in taking additional course work. A *final oral examination* by the supervisory committee covering the whole field of study of the candidate is required.

For further details, inquire of the Dean of the College of Agriculture.

MASTER OF PHYSICAL EDUCATION AND HEALTH

Work Required.—A minimum of 30 semester hours of course work is required, at least 15 of which must be courses in the fields of Physical Education, Health Education or Recreation designated strictly for graduates, or courses numbered 500 and above if approved for graduate major credit. Of the remaining 15 hours, at least 9 semester hours must be taken in courses outside the College of Physical Education and Health. At least 50 per cent of the minimum course requirements shall be from courses numbered 600 and above.

All degree candidates must complete Florida teaching certification requirements in Physical Education by the conclusion of the master's degree program. Certification requirements must be met as a part of and/or in addition to degree requirements, if not already completed before admission to graduate study.

Supervisory Committee.—A committee of five members of the faculty of the College of Physical Education and Health, with the Dean of the College or some person designated by him serving as chairman, and the Dean of the Graduate School as an exofficio member, will supervise the work of students registered in this program, subject to the approval of the Graduate Council.

Admission to Candidacy.—Admission to the work of this program is not a guarantee that the student will be admitted to candidacy for the degree. The student will be required to pass a written and/or oral examination in addition to being recommended by the supervisory committee for admission to candidacy. This examination should be taken by the end of the student's first semester of residence.

Final Examination.—A thesis is not required but the candidate must pass a final examination at the close of his course work. This written and/or oral examination will be administered by the supervisory committee and will be confined largely to the student's major field of study.

MASTER'S DEGREE WITH THESIS

Required Registration.—The minimum registration required for the master's degree with thesis is 30 semester hours, including no less than 24 semester hours of regular course work and 6 semester hours of the research and thesis course numbered 699 in all departments.

A least one-half of the required 24 hours of regular course work must be in a single field of study designated the major, and the remainder, called the minor, must be in a different but related subject matter. One 6-hour minor is required; two 6-hour minors or one 12-hour minor may be taken. Minor work must be in a department other than the major. In special cases this requirement may be modified, but only with the written permission of the Dean of the Graduate School.

The work in the major field must be in courses designated strictly for graduates (numbered 600 and above), or, if approved by the Graduate Dean, in courses designated for advanced undergraduates and graduates. For the minor, courses numbered 300 and above may be taken.

At least 50 per cent of the required 24 semester hours of regular course work must be in courses numbered 600 and above. Registration in 699 is limited to a total of 12 semester hours.

Thesis.—All candidates for this degree are required to prepare and present a thesis (or equivalent in creative work) acceptable to their supervisory committees, the Dean of the Graduate School, and the Graduate Council. The candidate should consult the office of the Dean for instructions concerning the form of the thesis. The original copy of the thesis, bound in temporary binding, and accompanied by three copies of a brief abstract, must be in the Dean's office on or before the dates specified in the University Calendar. After the thesis is accepted, the original copy, together with the first carbon copy, will be deposited in the University Library.

Language Requirements.—(1) The requirement of a reading knowledge of a foreign language is left to the discretion of the student's supervisory committee or college. When a foreign language is required, the examination will be conducted by the Department of Foreign Languages; if an examination has already

been passed at another institution, it must be validated at the University of Florida by the Department of Foreign Languages. If the student is majoring in a foreign language, that language may not be used to satisfy this requirement. The foreign language requirement must be satisfied before the student is admitted to candidacy. (2) The ability to use the English language correctly and effectively, as judged by the supervisory committee, is required of all candidates for this degree.

Special Supervisory Committee.—A special supervisory committee of not less than three members will be appointed for each student by the Graduate Dean upon the recommendation of the college concerned. This committee should be appointed as early as possible after the student has been admitted to the Graduate School and, in general, not later than the end of the first semester of study. The Dean of the Graduate School is an exofficio member of all supervisory committees.

Admission to Candidacy.—When a student has completed about one-half of his work for his degree, he should apply for admission to candidacy for that degree, using the forms provided for the purpose in the office of the Dean of the Graduate School. In order to be admitted to candidacy, the student must have (1) maintained a "B" average in registered course work, (2) passed a foreign language examination and a qualifying examination (if these are required in his curriculum), (3) chosen his thesis topic, (4) satisfied his supervisory committee, department head, and college dean that he is qualified to become a candidate for his degree. It is the responsibility of his supervisory committee at this time to make such investigation as is necessary to determine his eligibility.

General Examination.—When all of the student's work is completed, or practically so, including the regular courses and the thesis, his supervisory committee is required to examine him orally or in writing or both on (1) his thesis, (2) his major subject, (3) his minor or minors, (4) matters of a general nature pertaining to his field of study. Using the form provided for the purpose the committee shall report in writing to the Dean of the Graduate School not later than one week before the time for the conferring of the degree whether all work has been completed in a satisfactory manner and whether on the basis of the final examination the student is recommended for his degree. In no case may this examination be scheduled earlier than six months before the degree is to be conferred, without special approval of the Graduate Council.

Special Thesis Abstract Required.—At the request of the State Department of Education of the State of Florida, the College of Education requires all candidates for the degree of Master of Arts in Education to prepare a 750 word abstract of the thesis, which is forwarded to the State Department for informational purposes.

THE ADVANCED SCHOOL OF THE COLLEGE OF EDUCATION

The Advanced School of the College of Education offers two degrees, the degree of Specialist in Education and the Doctor of Education degree. Work in the Advanced School will be available only to those who have shown a high degree of ability in their first year of graduate work. The purpose of the Advanced School is to develop leadership, research competency, and specialization.

Admission to the Advanced School in Education.—Admission to the Advanced School will be open only to persons who have:

1. Successfully completed 36 hours of professional course work in education.
2. Presented a record of successful professional experience, the appropriateness of which will be determined by the instructional department passing on the applicant's qualifications for admission. In some instances departments may admit students with the understanding that further experience may be required before the student will be recommended for a degree.

Admission to the Advanced School will be based on the following criteria:

1. High scholastic average during the fifth-year work (3.5 honor-point average or above, as computed at the University of Florida, will be considered evidence of good scholarship);
2. Results from the Graduate Record Examinations—Scholastic Aptitude and Advanced Education Tests;
3. Results from the Miller Analogies Test;
4. An oral examination administered by the department in which the student seeks to specialize;
5. Special interviews for individuals for whom the department of specialization seeks more data.

The judgment concerning admission of an individual student will be based on the consideration of a student's performance in all of these areas by the department in which the student desires to specialize. The department will certify to the Admissions Committee that the student has met the criteria for admission to the Advanced School.

In all cases the record, experience, and personal qualifications of the person applying for admission are subject to the approval of the Admissions Committee.

Where possible, students should seek admission to the Advanced School before enrolling in any courses beyond the master's degree. Where this procedure is impossible, the student will register in the Graduate School and during the first semester of his work beyond the master's degree apply for admission to the Advanced School. If such candidate is found to be eligible, appropriate work taken during that term will be included in the planned program.

After completion of the fifth year any student approved by the Admissions Committee may register for courses, but admission to the Advanced School must be obtained before work may be counted for degrees or certificates above the master's level.

SPECIALIST IN EDUCATION

If the student chooses the Specialist in Education degree he will plan a minimum 36 hour program with his counselor. A maximum of 6 hours of transferred credit may be included. Such work must have been completed in an institution which offers the doctor's degree. No extension work may be transferred. Up to 6 hours in appropriate field laboratory courses, or 3 hours in field laboratory and

3 hours in regular extension courses offered by the General Extension Division of the University of Florida and Florida State University may be included.

The planned program of specialization must include at least 24 hours in courses open only to graduate students and the remainder in courses open to graduate and undergraduate students. The student may specialize in any of the established areas of the College of Education.

A thesis is not required. Emphasis will be placed upon the use of research rather than upon the development of skills in research techniques.

Admission to the Advanced School, the successful completion of one semester of work, and the approval of the department of specialization will constitute admission to candidacy for the Specialist in Education degree.

At the end of the 36-hour program the student will be given a final written and a final oral examination by a committee selected by the head of his area of specialization. Upon passing the examination the candidate will be awarded the Specialist in Education degree upon the approval of the faculty, and the Graduate Council.

The Ed.S. is planned as a terminal degree. If at the end of his program the student wishes to work for the Ed.D. he must meet the requirements stated for that degree.

Time Limit.—All work for the Specialist in Education degree must be completed within seven years from the time of first registration.

DOCTOR OF EDUCATION

The Doctor of Education degree is designed to develop scholarship and leadership in the field of Education. Each doctoral candidate is expected to achieve competence in the broad field of Education and in an area of specialization in which adequate supervision is available.

Administration of the program leading to this degree is cared for through the Office of Graduate Studies in Education, which carries out the policies of the Graduate School and the Graduate Committee of the College of Education.

Admission to a program of work leading to the degree of Doctor of Education requires admission to the Advanced School of the College of Education, described previously, as well as admission to the Graduate School of the University of Florida.

All courses beyond the master's degree taken at another institution, to be applied toward the Doctor of Education degree, must be taken at an institution offering the doctor's degree and approved for the transfer of graduate credit by the Graduate School of the University of Florida.

Minors.—Minor work, or work in cognate fields is required. If one minor is selected, at least 18 hours of work therein will be required; if two minors are chosen, one must have at least 12 hours of course work, the other at least six. Minors may not be taken in any branch of Education.

In lieu of a minor or minors, the candidate may present a suitable program of not fewer than 18 hours of cognate work in fields other than Education. This program must have the approval of the student's supervisory committee. The College of Education faculty will expect the candidate to be prepared to answer questions, at the time of his oral examination, in any of the areas so chosen.

Admission to Candidacy.—Admission to candidacy for the degree of Doctor of Education rests on successful completion of the qualifying examination. Recommendation to the Graduate School for admission to candidacy is based on action of the supervisory committee, subject to the approval of the Graduate Committee of the College of Education.

The Qualifying Examination.—The applicant is recommended for the qualifying examination by his supervisory committee after he has completed sufficient course work and the research preparation requirements of the College of Education.

The examination consists of (1) a general section, administered by the Graduate Committee of the College of Education to all applicants; (2) a field of specialization section administered by the department or faculty groups concerned; (3) examination in the minor or minors, where involved; and (4) an oral examination conducted by the applicant's supervisory committee.

The Seminar.—Each student is expected to develop a thesis project to be considered by a general doctoral seminar in the College. Participants in the seminar will be faculty members of the college, other advanced students, and members of the supervisory committee. At the conclusion of the seminar the supervisory committee will report thereon to the Graduate Committee of the College of Education.

Research Preparation Requirement.—This requirement is satisfied by meeting the requirements in both Group 1 and Group 2 below:

Group 1.—(1) a course in Education Research (EDF. 760) and
(2) the *library* usage examination (usually given in connection with EDF. 760 at the University of Florida), and
(3) a basic course in *statistics* (EDF. 360, or PSY. 211, or MS. 310, at the University of Florida).

Group 2.—either
(1) a reading knowledge of one foreign language relevant to the student's need, *or*
(2) one of the following courses in measurements, statistics, or research: SY. 547 or 670; EDF. 660 or PSY. 605; EDS. 605 or EDE. 702; EDF. 650; PSY. 503, 504, 632, or 743; PHA. 605 or 510.

There is no language requirement for the Doctor of Education degree. Courses taken at other institutions which may be the equivalent of course requirements indicated above may be considered, on recommendation of the applicant's supervisory committee.

Abstracts.—For the purpose of inclusion in a summary of research studies in Education, published by the College of Education, the candidate must supply one 1500-2500 word abstract of his dissertation, in addition to such other abstracts as may be required by the Dean of the Graduate School.

For information relating to *Residence*, the *Supervisory Committee*, *Time Limit*, the *Dissertation*, *Publication of the Dissertation*, and the *Final Examination*, the student is referred to the material presented under the heading *Doctor of Philosophy*. These statements are applicable to both degrees.

DOCTOR OF PHILOSOPHY

Course Requirements.—Doctoral study consists of the independent mastery of a field of knowledge and the successful prosecution of research, rather than in following out the steps of an established curriculum. For this reason, doctoral students are thrown in large measure on their own responsibility, and doctoral programs are more flexible and varied than those leading to lower degrees. The Graduate Council does not specify just what courses will be required for the Ph.D. degree, or how many. The basic general requirement is that the program should be unified in relation to a clear objective and that it should have the considered approval of the student's supervisory committee.

At least one and not more than two minors must be taken. The minor or minors may occupy as much as one third of a student's total time, or, roughly, one-half of the time devoted to course and seminar work.

Supervisory Committee.—The supervisory committee for a candidate for the degree of Doctor of Philosophy should consist of at least five members, chosen from the Graduate Faculty. At least three members should be from the college or department recommending the degree, and one or two members should be drawn from a different educational discipline for the purpose of representing the student's minor or minors and furthering the coordination on this campus between colleges and disciplines. Supervisory committees are nominated by the department head (in on case by the student), approved by the dean of the college, and appointed by the Dean of the Graduate School. It is recommended that the supervisory committee be appointed as early as possible after the student has been admitted to doctoral work and in general not later than the end of the first semester of study. The Graduate Dean is an ex officio member of all supervisory committees.

The duties of the supervisory committee are as follows:

1. To inform the student of all regulations governing the degree sought. It should be noted that this does not absolve the student from the responsibility for informing himself concerning these regulations. (See *Student Responsibility.*)

2. To meet immediately after appointment to pass on the qualifications of the student and to discuss and approve a program of study for him.

3. To meet to discuss and approve the proposed dissertation project and the plans for carrying it out.

4. To conduct the qualifying examination, or, in those cases where the examination is administered by the department, to take part in it.

5. To meet when the work on the dissertation is at least one-half completed to review procedure, progress, and expected results and to make suggestions for completion.

6. To meet when the dissertation is completed to conduct the final oral examination and to satisfy itself that the dissertation is a piece of original research and a contribution to knowledge.

Language Requirement.—Except as noted below, a reading knowledge of two languages other than English is required. These languages will normally be French and German, but they may be any languages which can be shown to be of significant use in the field of study in which the student is taking his degree. However, a combination of two modern Romance languages is not permitted. In all cases where the language chosen is other than French or German, the student will be required to justify his choice and to obtain the approval of his supervisory committee, his college, and the Graduate Council. Justification of choice will be accomplished by showing the existence of an acceptably sizable or rapidly growing body of relevant scholarly material in the language in question.

As an alternative to a reading knowledge of two languages other than English, a candidate for this degree may substitute a functional knowledge of one such language. A functional knowledge of a language is understood to mean the ability to read, write, and speak that language with reasonable ease and accuracy. This alternative is subject to the approval of the student's supervisory committee and college as well as the Graduate Council, and is permitted only when the knowledge of the language chosen can be shown to be needed in the preparation of the dissertation. For students in the Latin American Area Studies Program special requirements apply.

Knowledge of the languages presented will be tested and certified by the Department of Foreign Languages or by individuals or groups approved by this department. Where it is necessary for the examination to be conducted by individuals from outside the University, any expense involved will be borne by the student.

In certain departments individually approved by the Graduate Council (Business Administration and Agricultural Economics), a study of mathematics may be substituted for a reading knowledge of one foreign language. When this substitution is chosen, the courses in mathematics taken for this purpose may not be considered a part of the major or minor studies. The degree of proficiency in mathematics shall be determined as follows:

1. For a field in which calculus is not included through the master's degree, the student shall take and pass with a "B" or better the final examination in MS. 354 and any other courses in the Department of Mathematics specified by his supervisory committee.
2. For a field in which calculus is included as a part of the bachelor's or master's program, the student shall either pass with a "B" or better, or demonstrate equivalent proficiency by written examination in 6 semester hours of work in the Department of Mathematics requiring MS. 354 as a normal prerequisite.

The language requirement should be met as early as possible in the student's program and must be met before the student can be admitted to the qualifying examination.

Residence.—(1) The minimum residence requirement is three academic years of full-time resident graduate study, or equivalent, at institutions approved by the Graduate School. Either the second or the third academic years of the three-year program must be spent in full-time study (except as noted in the following paragraph) on the campus of the University of Florida. Candidates in Agronomy, Animal Husbandry, Horticulture, Plant Pathology, and Soils may do their re-

search at certain branch stations of the University of Florida Agricultural Experiment Station where adequate staff and facilities are available.

(2) In calculating residence, part-time study is evaluated on the basis of 15 semester hours as equal to a full load. Part-time study may be substituted for the year of full-time study stipulated in the preceding paragraph in either of the following proportions: (a) 30 semester hours earned in one calendar year; (b) 35 semester hours in four successive registrations (either including or excluding summer session registrations). An overload program, even when approved, will be valued as a normal program in meeting this residence requirement.

(3) Between the qualifying examination and the conferring of the degree, there must elapse a minimum of one academic year if the candidate is in full-time residence, or one full calendar year if the candidate is on less than a full-time basis.

Qualifying Examination.—The qualifying examination, which is required of all candidates for the degree of Doctor of Philosophy, may be taken during the second term of the second year of graduate study. The examination, conducted by the special supervisory committee, with the aid of the major and minor departments, is both written and oral and covers the major and minor subjects. The supervisory committee has the responsibility at this time of deciding whether the student is qualified to go on with work toward the Ph.D. degree.

If the student fails in his qualifying examination, he will not be given a re-examination unless for special reasons such an examination is recommended by his supervisory committee and approved by the Graduate Council. At least a semester of additional preparation is considered essential before re-examination.

Time Limit.—All work for the doctor's degree must be completed within five calendar years after the qualifying examination or this examination must be repeated.

Admission to Candidacy.—A graduate student does not become an actual candidate for the Ph.D. degree until he has been formally admitted to candidacy. Such admission requires the approval of the student's supervisory committee, the head of his department, his college dean, and the Dean of the Graduate School, and the approval must be based on (1) the academic record of the student, (2) the opinion of his supervisory committee concerning his over-all fitness for candidacy, and (3) a qualifying examination as described above. Application for admission to candidacy should be made at about the end of the second or the beginning of the third year of graduate study.

Dissertation.—A satisfactory dissertation showing independent investigation and research is required of all candidates. Since all doctoral dissertations will be published by microfilm, microcard, or printing, it is necessary that the work be of publishable quality and that it be in form appropriate for publication. The original copy of the dissertation must be presented to the Graduate Dean on or before the date specified in the University Calendar. The sum of $50 must be deposited with the Business Manager to cover the cost of publication as explained below.

Publication of the Dissertation.—Candidates for the Ph.D. and Ed.D. degrees may choose among the following three alternatives in the publication of their dissertations.

(1) Microfilm publication. In this case the University will refund $30 of the deposit as soon as the dissertation has been accepted and the final examination passed.

(2) Microcard publication. In this case the University will determine the cost of publication and either return any un-needed portion of the deposit or bill the student for any excess in cost above $50.

(3) Two-year postponement. The student may request a two-year period to investigate possibilities of publication by printing. If the dissertation is published as a book or monograph in essentially complete form, the Graduate Council will consider a request for refund of the entire deposit upon receipt of five copies of the published work. At the end of the two-year period, unless evidence of acceptance of the dissertation for such publication has been presented, the Graduate Council will authorize publication by microfilm as indicated under (1) above.

Copyright.—Under (1) above the student may choose to copyright his dissertation before publication. The charge involved will be deducted from the $50 deposit before refund can be arranged.

Final Examination.—After the acceptance of the dissertation and the completion of all other prescribed work for the degree, but in no case earlier than six months before the conferring of the degree, the candidate will be given a final examination, oral or written or both, by his supervisory committee. Satisfactory performance on this examination completes all requirements for the degree.

SPECIAL PROGRAMS

There are a number of special graduate programs that are described in detail in the University Catalog. Students interested in the following programs are referred to the catalog for complete information:

Cancer Research
School of Inter-American Studies.
Graduate Program in Public Administration
Research Program at The Oak Ridge Institute of Nuclear Studies
Statistical Laboratory
Graduate Program in Community Planning
Program in Vocational Rehabilitation

FLORIDA POST-GRADUATE CERTIFICATES

For regulations governing the securing of recommendations for the Florida Post-Graduate Certificate and the Advanced Post-Graduate Certificate, consult the Office of Graduate Studies in Education, 132 Yonge Building.

SPECIAL THREE WEEK COURSES

The courses listed in this section are for special groups and run for three weeks only. Students registering for courses listed in this section follow the same admission and registration procedures as other students but are limited to a maximum load of three semester hours.

June 18—July 6

AGRICULTURAL ENGINEERING

AG. 670.—Problems in Agricultural Engineering. 3 credits. Open only to vocational agriculture teachers.
To arrange AGE 15 ROGERS, C. J. and ROGERS, F.

Special problems in agricultural engineering.

AGRICULTURAL EXTENSION

AXT. 601.—Advanced Rural Leadership. 1½ credits per session, maximum 6 credits.
10:30 Daily PEA 308 GRIGSBY, S. E.
Laboratory: 1:00 to 4:00 W PEA 308

Advanced training covering the aspect of Small Group Leadership.

AXT. 607.—Principles in Development of Youth Programs. 1½ credits.
9:20 Daily McC 121 HAMPSON, C. M.
Laboratory: 1:00 to 4:00 Th McC 121

Advanced training in conducting 4-H Club work.

EDUCATION—GENERAL

ED. 482.—Planning for Improved Daily Living. 3 credits.
Section 1. 8:10-12:40 Daily YON 323 INGLE, K.

A study of Florida resources is made applicable to richer living. Attention is given to developing appreciation and understanding of art principles applied to costume design, home decoration, and other phases of esthetic living.

EDUCATION—ELEMENTARY

EDE. 700.—Problems in Elementary Education, I. 3 credits. Prerequisite: Permission of the Head of the Department.
8:10-11:30 Daily BRO ZIRBES, L.

Primarily designed for experienced teachers with Master's degrees who are interested in a more creative approach to working with children in elementary classrooms.

EDE. 560.—Teaching Science in the Elementary Schools. 3 credits.
11:40-3:00 Daily YON 150 YOUNG, M.

EDUCATION—FOUNDATIONS

EDF. 640.—Problems in Pupil Development and Learning. 3 credits.
Section 3 8:10-11:30, 2:00-4:10 Daily YON 43 GORDON, I. J. and STAFF

EDF. 641.—Educational Psychology—Personality Dynamics. 3 credits.
Section 2 9:20-12:40, 2:00-4:10 Daily BRO SNYGG, D.

EDUCATION—SECONDARY

EDS. 604.—Curriculum Development Laboratory (Adult Education.) 3 credits.
Section 1 8:10-11:30 Daily BRO

Guided experiences in developing resource units for teaching and the writing of courses of study.

EDUCATION—VOCATIONAL AGRICULTURE

EDV. 672.—Preparing Course Materials and Community Programs in Agriculture. 3 credits.
8:10-11:40 Daily AGE 101 LOFTEN, W. T.

A course of study and a community program will be planned by each student to suit his particular area.

ENGLISH

EH. 133.—Effective Writing. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.
Section 1 8:10-11:30 Daily D 120 WALKER, B. H.

Designed to aid the student to present his ideas in writing which is not only accurate and clear but pleasing and attractive to the reader. Qualified students are encouraged to do imaginative writing.

HORTICULTURE

HE. 650.—Projects in Citrus Production (Fertilization)
8:10 Daily MCC 9 ZIEGLER, L. W.
Laboratory: 12:50 to 4:10 T MCC 105

1 hour, and 4 hours field work. 3 credits per project. Maximum 12 credits. Prerequisite: HE. 341 or its equivalent and consent of instructor. Offered 2, 3. Field work during second semester followed by classroom work in summer session. No credit until project is completed. Offered primarily to Agricultural Extension Workers and Vocational Agriculture Teachers. Each time it is offered, this course will be announced in the schedule of courses with one of the following projects specified: Stocks and Scions, Fertilization, Spray Schedules, or Maturity and Grade.

INDUSTRIAL ARTS

IN. 624.—Problems in Industrial Arts and Vocational Education. 3 credits.
8:10-11:30 Daily AGE 114 MORRISON, J.

Seminar for advanced students.

SOILS

SLS. 352.—Soils Management. 1½ credits. Prerequisite: SLS. 301.
8:10 Daily McC 2 EDSON, S. N.
Laboratory: 1:00 to 4:00 T McC 123

The physical, chemical, and biological nature of soils with special emphasis on soil management. Laboratory problems in soil management.

SPECIAL FOUR WEEK COURSE

June 18—July 12

Enrollment limited to selected educators from certain counties in Florida. Not open to general registration. Application forms may be obtained by writing the instructor and the application must be approved prior to June 1, 1957.

PHYSICAL EDUCATION, HEALTH AND ATHLETICS

PHA. 491.—The operation of Community Health Education Programs. 3 credits.
Prerequisite: Permission of the instructor.
8:30-12:00, 2:00-4:00 Daily FLG 201 HICKS, D. A.

Problems in operating community programs of health education. Field experiences in the student's local county health agencies, both official and voluntary. The course is offered in cooperation with the College of Education, the State Department of Education and the State Board of Health.

SPECIAL THREE WEEK COURSES

July 8—July 26

EDUCATION—GENERAL

ED. 482.—Planning for Improved Daily Living. 3 credits.
Section 2. 8:10-12:40 Daily YON 323 INGLE, K.

ED. 670.—Workshop in Human Relations in Education. 3 credits.
9:20-12:40 Daily BRO

Various problems in human relations and ways of working with them and seeking solutions, form the core of the workshop experiences. Open to teachers, principals, lay leaders, and others concerned with techniques and procedures, with group dynamics and group process.

EDUCATION—ADMINISTRATION

EDA. 607.—Administration of Teacher Personnel. 3 credits.
8:10-11:30 BRO SIMMONS, G. B.

EDUCATION—ELEMENTARY

EDE. 570.—Teaching of Reading. 3 credits.
Section 2 9:20-12:40 Daily BRO HAIMBACH, D.

EDE. 600.—Elementary School Curriculum. 3 credits.
Section 3 8:10-11:30 Daily BRO WILSON, C.

EDUCATION—FOUNDATIONS

EDF. 640.—Problems in Pupil Development and Learning. 3 credits.
Section 4. 8:10-11:30, 2:00-4:10 Daily YON 43 GORDON, I. J. AND STAFF

EDF. 642.—Educational Psychology—Problems. 3 credits.
Section 2. 8:10-12:20, 12:50- 4:10 BRO KURTZ, J.

EDUCATIONAL—PERSONNEL SERVICES

EDP. 600.—Teaching Exceptional Children. 3 credits.
9:20-12:40 Daily BRO McCUTCHEN, K., AND MAC CURDY, R. D.

A workshop directed towards a better understanding of exceptional children and educational program related to their abilities and disabilities. Emphasis will be placed on strengthening the total school program through the cooperation of special services and public and private agencies. Outstanding consultants will participate in the three areas of major interest: education of the gifted child, the slow learning child and the orthopedically handicapped. This workshop should be of interest to regular classroom teachers, special teachers, supervisors and administrators.

EDUCATION—SECONDARY

EDS. 603.—Community College Education. 3 credits.
8:10-11:30 Daily BRO

An analysis of the program and problems of the community college.

INDUSTRIAL ARTS

IN. 630.—Individual Work. 3 credits.

Section 2. To arrange YON 300 BERGENGREN, R. F.

Problems approved by the instructor.

IN. 635.—Curriculum Symposium in Industrial Education. 3 credits.

8:10-11:30 Daily AGE 101 MORRISON, J.

A staff symposium concerning the industrial curriculum, a review of the current situation and research of a projective nature.

SPECIAL SIX WEEK COURSE

June 18—July 26

THE COURSE LISTED IN THIS SECTION RUNS FOR SIX WEEKS ONLY. STUDENTS REGISTERING FOR THE COURSE BELOW FOLLOW THE SAME ADMISSION AND REGISTRATION PROCEDURES AS OTHER STUDENTS BUT ARE LIMITED TO A MAXIMUM LOAD OF SIX SEMESTER HOURS.

EDUCATION IN FAMILY FINANCE WORKSHOP. Workshop sponsored by Committee on Education in Family Finance, the College of Education, and the College of Business Administration. (See EDS. 604, Section 1 and EDS. 641.)

PHYSICAL EDUCATION WORKSHOP. This is offered in cooperation with the State Department of Education, the Florida Athletic Coaches Association, and the Florida High School Activities Association.(See PHA. 645.)

WORKSHOP FOR JUNIOR HIGH SCHOOL MATHEMATICS TEACHERS. Sponsored by the College of Education and the Mathematics Department of the College of Arts and Sciences, this workshop deals with the fundamental mathematical concepts and processes taught in grades 7, 8 and 9, such as number concepts, operations with numbers, intuitive geometry and elementary algebra. Also includes the organization of the mathematics curriculum in the junior high school, trends in the teaching of mathematics, construction and use of instructional materials, field work and laboratory experiences, and guided experiences in the development of plans for teaching units. (See EDS. 550 and MS. 325.)

EDUCATION SECONDARY

EDS. 550.—The Teaching of Junior High School Mathematics. 3 credits.
(Must be taken concurrently with MS. 325.)
8:10-11:30 Daily WAL 304 KIDD, K. P., and SADLER, S. G.

EDS. 604.—Curriculum Development Laboratory. (Formerly EN. 520). 3 credits.
(Must be taken concurrently with EDS. 641.)
Section 2. 12:50-3:00 Daily BRO MYERS, R. B., and STAFF

Guided experiences in developing resource units for teaching and the writing of courses of study.

EDS. 641.—Economic Education in the Secondary School. (Formerly EN. 580). 3 credits. (Must be taken concurrently with EDS. 604, Section 1.)
8:10-11:30 Daily BRO MYERS, R. B., and STAFF

Study and development of economic materials for better teaching of economic understandings in the elementary and secondary schools.

PHYSICAL EDUCATION, HEALTH AND ATHLETICS

PHA. 645.—Physical Education Workshop Series. 6 credits. Prerequisite: Permission of the Instructor.

8:30-12:00, 2:00-4:00 Daily FLG 216 CHERRY, H. S. and STAFF

MATHEMATICS

MS. 325.—Advanced General Mathematics. 3 credits. (Must be taken concurrently with EDS. 550)

Section 2. 12:50-3:00 Daily WAL 304 KIDD, K. P., and SADLER, S. G.

SCHEDULE OF COURSES SUMMER SESSION 1957

JUNE 18 TO AUGUST 10

MINIMUM SIZE OF CLASSES

No undergraduate class or section will be continued or offered if, at the end of the regular registration period, prior to the day classes begin for a term or semester, the registration does not meet the following minimum requirements.

For Freshmen and Sophomore classes or sections (the comprehensive courses and courses numbered in the 100's and 200's) the minimum is 12 registrations.

For Junior classes or sections (courses numbered in the 300's) the minimum is 8 registrations.

For Senior classes or sections (courses numbered in the 400's and 500's) the minimum is 6 registrations.

ABBREVIATIONS

The following abbreviations have been used to designate buildings:

ADM	ADMINISTRATION BUILDING
AE	BUILDING AE (Family Life)
AGE	AGRICULTURAL ENGINEERING BUILDING
ALA	AGRONOMY LABORATORY
AND	ANDERSON HALL
B	BUILDING B
BNX	BENTON ANNEX
BEN	BENTON HALL
C	BUILDING C (Art)
CRL	CANCER RESEARCH LABORATORY
CIL	CITRUS LABORATORY
DAL	DAIRY LABORATORY
E	BUILDING E
ENG	ENGINEERING AND INDUSTRIES BUILDING
F	BUILDING F
FLI	FLINT HALL
FLG	FLORIDA GYMNASIUM
FLO	FLOYD HALL
FML	FARM MACHINE LABORATORY
HGH	HORTICULTURE GREENHOUSE
I	BUILDING I (Classrooms)
J	BUILDING J (Biology Laboratory)
K	BUILDING K
L	BUILDING L
LAW	LAW BUILDING
LEI	LEIGH HALL
LIB	LIBRARY
LSP	LIVESTOCK PAVILION
MCC	DAN McCARTY HALL
MAT	MATHERLY HALL
MSB	MEDICAL SCIENCES BUILDING
MIL	MILITARY BUILDING
MPL	MEAT PRODUCTS LABORATORY
N	BUILDING N (Engineering Classrooms and Laboratories)
NEW	NEWELL, Hall
NEA	NEWELL ANNEX
NUL	NUTRITION LABORATORY
OD	OFFICE D
OE	OFFICE E
OF	OFFICE F
PEA	PEABODY HALL
PEC	PEST CONTROL BUILDING
POL	POULTRY LABORATORY
R	BUILDING R (Music)
RLA	REED LABORATORY
ROL	ROLFS HALL
SEA	SEAGLE BUILDING
SAL	SANITARY LABORATORY

STA	STADIUM	VFH	VEGETABLE FIELD HOUSE
TUL	TUNG LABORATORY	WAL	WALKER HALL
U	BUILDING U (Architecture and Art)	WGY	WOMEN'S GYM
		WPL	WOOD PRODUCTS LABORATORY
UAN	FLORIDA UNION ANNEX	X	BUILDING X
VEL	VEGETABLE PROCESSING LABORATORY	YON	YONGE BUILDING

C-1

C-11.—American Institutions. 4 credits.

(Register for the lecture and one discussion section.)

Lecture Section 11: 10:30 MW WAL AUD

Discussion Sections:

Section 101 7:00 Daily PEA 206
Section 102 7:00 Daily PEA 208
Section 103 8:10 Daily PEA 206
Section 104 8:10 Daily PEA 208
Section 105 9:20 Daily PEA 206
Section 106 9:20 Daily PEA 208

C-12.—American Institutions. 4 credits.

(Register for the lecture and one discussion section.)

Lecture Section 21: 10:30 T Th WAL AUD

Discussion Sections:

Section 201 7:00 Daily PEA 102
Section 202 8:10 Daily PEA 102
Section 203 9:20 Daily PEA 102

C-11-12: Designed to develop and stimulate the ability to interpret the interrelated problems confronting American institutions. The unequal rates of change in technology, in economic life, in government, in family life, in education, and in religion are analyzed and interpreted to show the need for a more effective co-ordination of the factors of our evolving social organizations of today. Careful scrutiny is made of the changing functions of our institutions as joint interdependent activities so that a consciousness of the significant relationships between the individual and social institutions may be developed, from which consciousness a greater degree of social adjustment may be achieved.

C-2

C-21.—The Physical Sciences. 3 credits.

(Register for the Lecture Section and one Discussion Section.)

Lecture Section 11: 2:00 MW BEN 203

Discussion Sections:

Section 101 8:10 Daily BEN 201
Section 102 9:20 Daily BEN 201
Section 103 10:30 Daily BEN 201

C-22.—The Physical Sciences. 3 credits.

(Register for one section only.)

Section 201 8:10 Daily BEN 205
Section 202 9:20 Daily BEN 205
Section 203 8:10 Daily BEN 203
Section 204 10:30 Daily BEN 205

C-21-22: The primary aim of the course is to give the student a working knowledge, through the solution of numerous problems, of the physical factors in the environment which affect the development of civilization, with its various cultures. These factors are primarily space relations, weather and climate, landforms, and material and energy resources. The concepts are taken from the fields of astronomy, physical geography, meteorology and climatology, geology, chemistry, and physics.

C-3

C-31.—Reading, Speaking, and Writing: Freshman English. 4 credits.
(Register for the Lecture Section, one Discussion Section, and one Laboratory Section)
Lecture Section 11: 8:10 W WAL AUD

Discussion Sections:
Section 101 7:00 M T Th F AND 20
Section 102 8:10 M T Th F AND 20
Section 103 8:10 M T Th F MAT 4
Section 104 9:20 M T Th F AND 20
Section 105 10:30 M T Th F MAT 6
Section 106 11:40 M T Th F AND 20

Writing Laboratory Sections:
Section 301 8:10- 9:30 M Th AND 203
Section 302 10:30-12:10 M Th AND 203
Section 303 12:50- 2:30 M Th AND 203
Section 304 10:30-12:10 T F AND 209

C-32.—Reading, Speaking, and Writing: Freshman English. 4 credits.
(Register for the Lecture Section, one Discussion Section, and one Laboratory Section)
Lecture Section 21. 9:20 W WAL AUD

Discussion Sections:
Section 201 8:10 M T Th F MAT 6
Section 202 9:20 M T Th F MAT 6
Section 203 9:20 M T Th F MAT 4
Section 204 11:40 M T Th F MAT 4

Writing Laboratory Sections:
Section 401 8:10- 9:50 T F AND 203
Section 402 10:30-12:10 T F AND 203
Section 403 12:50- 2:30 M Th AND 209

C-31-32: Reading, Speaking, and Writing. Designed to furnish the training in reading, speaking, and writing necessary for the student's work in college and for his life thereafter. This training will be provided through practice and counsel in oral reading, in silent reading, in logical thinking, in fundamentals of form and style, in extension of vocabulary and in control of the body and voice in speaking. Students will be encouraged to read widely as a means of broadening their interests and increasing their understanding of literature.

EH. 133.—Effective Writing. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.
2:00 Daily D 120 WALKER, B. H.
3:10 W

Designed to aid the student to present his ideas in writing which is not only accurate and clear but pleasing and attractive to the reader. Qualified students are encouraged to do imaginative writing.

EH. 134.—Contemporary Reading. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.
10:30 Daily AND 20 CUTLER, R.

Designed to aid the student in planning for himself a well-rounded program in reading, which will serve to keep him abreast of the best in contemporary thought. Some time will be spent in introducing each student to the bibliography and writing in the area of his special professional interest.

C-41

C-41.—**Practical Logic.** 3 credits

(Register for one section only.)

Section 1	8:10	Daily	ADM 208
Section 2	9:20	Daily	ADM 208
Section 3	10:30	Daily	ADM 208
Section 4	11:40	Daily	ADM 208

Both in private life and in vocational life man is faced with the necessity of thinking. In this course an attempt is made to stimulate the student (1) to develop his ability to think with greater accuracy and thoroughness, (2) to be able to use objective standards necessary in critically evaluating his own thinking process and product as well as the conclusions reached by others, and (3) to record both process and product of thinking in effective language. The material used applies to actual living and working conditions. The case method is to insure practice, many illustrations are given, and numerous exercises are assigned.

C-42

C-42.—**Fundamental Mathematics.** 3 credits.

(Register for one section only.)

Section 1	8:10	Daily	PEA 7
Section 2	9:20	Daily	PEA 7
Section 3	10:30	Daily	PEA 7
Section 4	11:40	Daily	PEA 7

A practical elementary course consisting of the subject matter considered most useful for students who do not plan necessarily to specialize in mathematics. It covers the development of the number system, computation with approximate and exact numbers, algebra as a generalization of arithmetic, practical geometry, functional relationships, logarithms, the simple trigonometry of the triangle, simple and compound interest, and annuities. Not open to students who have completed Basic Mathematics.

C-5

C-51.—**Humanities.** 4 credits.

(Register for the Lecture Section and one Discussion Section)

Lecture Section 11: 11:40 M W WA AUD.

Discussion Sections:

Section 101	7:00	Daily	AND 115
Section 102	8:10	Daily	AND 115
Section 103	9:20	Daily	AND 115
Section 104	10:30	Daily	AND 115
Section 105	12:50	Daily	AND 115
Section 106	7:00	Daily	AND 113
Section 107	8:10	Daily	AND 113
Section 108	9:20	Daily	AND 113
Section 109	10:30	Daily	AND 113
Section 110	9:20	Daily	AND 110
Section 111	10:30	Daily	AND 110

C-52.—**Humanities.** 4 credits.

(Register for the Lecture Section and one Discussion Section.)

Lecture Section 21: 11:40 T Th WA AUD

Discussion Sections:

Section 201	7:00	Daily	AND 112
Section 202	8:10	Daily	AND 112
Section 203	9:20	Daily	AND 112
Section 204	10:30	Daily	AND 112
Section 205	12:50	Daily	AND 112
Section 206	8:10	Daily	AND 110

C-5.—The Humanities

A course designed to acquaint the student with the great literature, philosophy, art and music in Western Civilization. Both our cultural heritage and the culture of our own day are studied. Major emphasis is placed upon mature understanding, enlarged appreciation, and a philosophy of life adequate for the needs of our age.

C-6

C-61.—Biological Sciences. 3 credits.

(Register for one Lecture Section and one Discussion Section.)

Lecture Section 11: 11:40 T FLI 101
Lecture Section 12: 2:00 Th FLI 101
Discussion Sections:
Section 101 7:00 Daily FLI 104
Section 102 8:10 Daily FLI 104
Section 103 9:20 Daily FLI 104
Section 104 10:30 Daily FLI 104
Section 105 11:40 Daily FLI 104
Section 106 8:10 Daily FLI 110
Section 107 9:20 Daily FLI 110

C-62.—Biological Sciences. 3 credits.

(Register for one Lecture Section and one Discussion Section.)

Lecture Section 21: 2:00 T FLI 101
Lecture Section 22: 11:40 Th FLI 101
Discussion Sections:
Section 201 7:00 Daily FLI 112
Section 202 8:10 Daily FLI 112
Section 203 9:20 Daily FLI 112
Section 204 10:30 Daily FLI 112
Section 205 8:10 Daily FLI 102
Section 206 10:30 Daily FLI 110

ACCOUNTING

ATG. 211.—Elementary Accounting. 3 credits. The first half of the course ATG. 211-212.

(Register for one section only.)

Section 1. 8:10 Daily MAT 225 DA VAULT, J. W.
Section 2. 10:30 Daily MAT 225

The basic training in business practice and in accounting. A study of business papers and records; recording transactions; preparation of financial statements and reports.

ATG. 212.—Elementary Accounting. 3 credits. The second half of the course ATG. 211-212.

(Register for one section only.)

Section 1. 8:10 Daily MAT 224 ANDERSON, C. A.
Section 2. 9:20 Daily MAT 225

ATG. 311.—Accounting Principles. 3 credits. Prerequisite: ATG. 212.

8:10 Daily MAT 16

The mechanical and statistical aspects of accounting; books of record; accounts; fiscal period and adjustments; working papers; form and preparation of financial statements; followed by an intensive and critical study of the problems of valuation as they affect the preparation of the balance sheet and income statements.

ATG. 312.—Accounting Principles. 3 credits. Prerequisite: ATG. 311.
9:20 Daily MAT 16

The legal aspects of accounting and related problems resulting from the legal organization form used by business; liabilities; proprietorship; corporations; capital stock; surplus; followed by a study of the financial aspects of accounting as disclosed by an analysis and interpretation of financial statements; financial ratios and standards, their preparation, meaning and use.

ATG. 313.—Cost Accounting. 3 credits. Prerequisite: ATG. 212.
10:30 Daily MAT 224 DA VAULT, J. W.

The methods of collection, classification, and interpretation of cost data; special problems, standard costs, cost systems, use of cost data in business control.

ATG. 411.—Advanced Accounting. Problems. 3 credits. Prerequisite: ATG. 312.
11:40 Daily MAT 224

Specialized accounting problems; partnerships; statement of affairs; consignments; installments; ventures; insurance and other related subjects.

ATG. 412.—Principles of Auditing. 3 credits. Prerequisite: ATG. 312.
9:20 Daily MAT 119

Auditing theory and current auditing practice; principal kinds of audits and services of the public accountant; professional and ethical aspects of auditing.

ATG. 414.—Income Tax Accounting. 3 credits. Prerequisite: ATG. 311.
8:10 Daily MAT 119

A study of the federal income tax law and related accounting problems. Determination of gross income and of deductions is studied for taxpayers generally. The course emphasizes this process for individuals. Practice is provided in the preparation of returns for individuals, and in the use of the loose-leaf income tax service.

ATG. 415.—Corporate Accounting Problems. 3 credits. Prerequisite: ATG. 411.
10:30 Daily MAT 119 ANDERSON, C. A.

The corporate accounting problems concerning consolidation, reorganization, quasi-reorganization, mergers and voluntary and involuntary liquidations.

ATG. 417.—Governmental Accounting. 3 credits. Prerequisite or corequisite: ATG. 311.
11:40 Daily MAT 225

The basic principles underlying governmental and institutional accounting. Detailed consideration is given to the operation of recommended types of funds, the budget process, account structure, tax accounting for cities, and the utilization of accounting in the preparation of significant reports.

GRADUATE COURSES

ATG. 611.—Accounting Theory. 3 credits. Prerequisite: ATG. 411.
9:20 Daily MAT 224 LANHAM, J. S.

The theory behind accounting functions in their relations to the business enterprise.

ATG. 613.—Cost and Budgeting Accounting. 3 credits. Prerequisites: ATG. 313, ATG. 411 and ATG. 412.
10:30 Daily MAT 16

An analysis of complex cost problems, managerial use of cost reports in management and budget preparation, as well as the design and installation of cost systems.

ATG. 614.—Federal Income Tax Accounting. 3 credits. Prerequisite: ATG. 414.
11:40 Daily MAT 119

Advanced consideration of corporation income tax accounting; procedure in respect to the controversies over income tax liability, including rules of practice before the Treasury Department and the Tax Court; and federal estate and gift taxes, including their income tax aspects. This course requires some original search for the application of income tax standards, and provides for the preparation of reports and briefs.

ATG. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

Directed research and writing for the Master's degree, taken toward the end of the student's graduate program for credit in addition to the 24 hours required for the Master's degree.

ATG. 799.—Research and Doctoral Dissertation. 1 to 6 hours credit.*
To arrange

Directed research and writing for the Ph.D. degree, taken toward the end of the student's graduate program for credit in addition to the hours of regular courses required by the candidate's supervisory committee for the doctor's degree.
*Credit assigned must be shown on course assignment card.

AERONAUTICAL ENGINEERING

AN. 286.—Introductory Aerodynamics. 3 credits. Prerequisite: PS. 205. Corequisites: PS. 206, EM. 365.
9:20 Daily N 210

The airplane. The atmosphere. Fundamental dynamics and thermodynamics of air. Types of fluid flow. Airfoil theory. Wing theory.

AGRICULTURAL ECONOMICS

AS. 201.—Principles of Agricultural Economics. 3 credits.
11:40 Daily MCC 44 GREENMAN, J. R.

An introduction to the field of agricultural economics; principles of economics as applied to agriculture; economic problems of the agricultural industry and the individual farmer.

AS. 304.—Farm Finance and Appraisal. 3 credits.
8:10 Daily MCC 37 BROOKE, D. L.

Volume, sources and uses of agricultural credit in Florida and the United States. The principles of credit and problems peculiar to financing farmers and farmers' associations. One field trip usually required.

AS. 306.—Farm Management. 3 credits.
10:30 Daily MCC 37 SARLE, C. F.

Not open to freshmen. Introduction to the principles of farm management. Types of farming in Florida and the United States, and factors which determine types of farming. The causes of success and failure of farms and farmers. Problems of labor, machinery, layout of farms, farm reorganization, and such.

AS. 308.—Marketing. 3 credits.
8:10 Daily MCC 44 McPHERSON, W. K.

Basic principles of marketing with emphasis placed on market functions, services, and organizations; elementary theory of demand and prices; commodity exchanges and future trading; transportation; grades and standards; market news; methods of increasing efficiency of markets; the role of co-ops and government in marketing. One field trip required.

AS. 413.—Agricultural Policy. 3 credits.
9:20 Daily MCC 44 GREENMAN, J. R.

A history of farmer attempts and accomplishments through organization and legislation to improve the economic and social status of agriculture. The basic problems and concepts involved in developing and carrying out an agricultural policy. Evaluation of present legislative programs and policies affecting the farmer.

COURSE FOR ADVANCED UNDERGRADUATES AND GRADUATES

AS. 501.—Research Problems in Land Economics. 3 credits.
To arrange.

Prerequisite: consent of instructor. Economic problems created by the continually changing uses of land resources, i.e., water, soil, timber, climate, situs, will be studied. Each student will select a problem, outline and conduct research on that problem and prepare a written report. Students majoring in other departments will be encouraged to select problems that will help them evaluate economic and social impact of the prograss being made in other fields of learning, on the natural resource base, i.e., animal husbandry, agronomy, soils, forestry, community planning, Latin American programs, etc.

GRADUATE COURSES

AS. 605.—Research Problems in Farm Management. 3 credits.
To arrange.

Designed to train students in collecting, analyzing and presenting data on problems in the field of farm management. Special problems of interest to the individual student and agreeable with the instructor are selected for study. A statement of the problem is prepared, research work studied, publications reviewed and written reports developed.

AS. 611.—Research Problems in Marketing Agricultural Products. 3 credits.
To arrange.

Individual examinations of segments of the marketing system for Florida products. Emphasis may be placed on efficiency, market organization, trading arrangements, historical development or other aspects of the problem of interest to the student and agreeable with the instructor. A comprehensive report on the investigations and conclusions of the student is required.

AS. 628.—Problems in Statistics. 1-3 credits.*
To arrange. Identical with AY. 628.

Prerequisite: A graduate course in statistics. Special problems in statistics, in the areas of research methods, sampling methods, experimental design, theory of sampling and theory of experimental designs.

AS. 699.—Research and Master's Thesis. 0-6 credits.*
To arrange.

AS. 799.—Research and Doctoral Dissertation. 1-6 credits.*
To arrange.

*Credit assigned must be shown on course assignment card.

AGRICULTURAL ENGINEERING

AG. 302.—Farm Motors. 3 credits.
8:10 M T W Th AGE 15 CHOATE, R. E.
Laboratory: 2:00 to 4:10 M AGE 16

The general principles of operation of the various sources of farm power. Laboratory work includes actual operation and repair of units.

AG. 403.—Agricultural Engineering Investigations. 2 credits.
4:20 M T W Th AGE 15 ROGERS, F.

Assigned reading and reports of recent developments in the field of agricultural engineering.

GRADUATE COURSES

AG. 671.—Research Problems in Irrigation. 3 credits.
To arrange AGE 9 CHOATE, R. E.

AG. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange AGE 9 STAFF.

*Credit assigned must be shown on course assignment card.

AGRICULTURAL EXTENSION

GRADUATE COURSE

AXT. 621.—Special Problems in Agricultural Extension Methods. Variable credit.*
To arrange. HAMPSON, C. M.

Library and workshop relating to agricultural extension methods. Research work is studied, publications reviewed, written reports developed.

*Credit assigned must be shown on course assignment card.

AGRONOMY

AY. 329.—Genetics. 3 credits.
8:10 Daily McC. 204 WALLACE, A. T.

The fundamentals of inheritance, emphasizing the application of genetics and its associated branches of science in the improvement of economic plants and animals and in programs for human betterment.

AY. 426.—Individual Problems in Agronomy. Variable credit.
To arrange. McC 209 SENN, P. H.

Individual problems selected from the fields of crop production or weed control.

AY. 436.—Pastures. 3 credits.
10:30 M T W Th McC. 204 RUELKE, O. C.
Laboratory 12:50-3:00 W McC. 204 RUELKE, O. C.

The development and management of grazing areas of southeastern United States, with particular reference to Florida conditions. Importance of pastures in present day agriculture and management for greater economic returns.

GRADUATE COURSES

AY. 626.—Agronomic Problems. 3 credits.
To arrange. McC. 209 SENN, P. H.

Library, laboratory, or field studies which relate to crop production and improvement. Experiments are studied, publications reviewed and written reports developed.

AY. 627.—Problems in Genetics and Cytogenetics. Variable credit.*
To arrange. McC. 209 EDWARDSON, J. R.

Modern methods applied to specific genetic or cytogenetic research problems.

AY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange. McC. 209 SENN, P. H.

AY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange. McC. 209 SENN, P. H.

*Credit assigned must be shown on course assignment card.

ANIMAL HUSBANDRY AND NUTRITION

AL. 309.—General Animal Husbandry. 3 credits.
7:00 Daily MCC 44 WAKEMAN, D. L.

Types and breeds of farm animals; market classification; selection and management.

GRADUATE COURSES

AL. 601.—Special Topics in Animal Science. 3 credits.
To arrange

Reviews and discussions of scientific literature in the field of animal science.

AL. 609.—Problems in Animal Husbandry and Nutrition. Variable credit.*
To arrange

AL. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

AL. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange

*Credit assigned must be shown on course assignment card.

ANTHROPOLOGY

APY. 500.—Field Session in Archeology. 6 credits. Prerequisite: 6 hours of anthropology, including APY. 201.
To arrange GOGGIN, J. M.

Excavation of archeological sites, recording of data, laboratory handling and analysis of specimens; and study of the theoretical culture principles which underlie field methods and artifact analysis.

APY. 530.—Individual Work. 3 credits. Prerequisite: 12 hours of anthropology, including APY. 201.
To arrange STAFF

ARCHITECTURE

AE. 101.—The Arts of Design. 3 credits.
2:00 Daily E 176

A survey of the visual arts: An introduction to the principles of Landscape Architecture, Community Planning, Architecture, Building Construction, Interior Design, and allied arts. Course objectives are to lead the student into an understanding and enjoyment of the visual arts and to enable him to develop a valid basis in the selection of a career in the arts of design.

AE. 102.—Vision and Graphics, I. 3 credits.
9:20-12:40 Daily E 116.

Functions and limitations of vision. The interpretation of spatial relationships. Visual and graphic exercises for development of observation, graphic techniques, imaginative ability, visual design, and aesthetic judgment. Study of the elements of design and principles involved in their use.

AE. 203.—Vision and Graphics, II. 3 credits.
9:20-12:40 Daily E 174

Prerequisites: AE. 101, AE. 102. Techniques of graphic representation. Projects in Research and Design. Introduction to the organization of space for human activity. The study of the basic influences of climate, natural environment, technology, and culture on the design and construction of shelter.

AE. 204.—Basic Design. 3 credits.
12:50-4:10 Daily E 126

Prerequisite: AE. 203 or approval of Adviser. Continuation of AE. 203. Projects in Building Research and Architectural Design. Introduction to the study and application of planning techniques.

AE. 205.—Building Technology. 3 credits.
7:00-9:10 Daily E 157

The first half of the course AE. 205-206. Corequisite: Ps-201. The materials and methods of building. The analysis of natural and manufactured building materials; their sources: their physical, structural, and aesthetic properties. The study of elementary framing systems; their methods of assembly and architectural expression. An introduction to mechanical equipment.

AE. 206.—Building Technology. 3 credits.
7:00-9:10 Daily E 176

The second half of the course AE. 205-206. Prerequisite: AE-205, MS-105 or approved alternate. Mechanics and strength of materials: The study of types of loads exerted on buildings, their transmission through the building frame and the forces and stresses produced in structural framing members. The characteristics of basis types of structural building frames and their integration in design.

UPPER DIVISION COURSES

AE. 321-322-323.—Special Studies in Architecture. 3 credits each unit.
10:30 Daily E 176

Completion of Lower Division program in Architecture, its equivalent, or approval of Adviser. Special studies in Architecture adjusted to transfer students, special students, or other upper division students.

AE. 506-507-508-509-510.—Thesis in Architecture. 3 credits each; group total 15 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series AE. 501-502-503-504-505.

To arrange E 175

GRADUATE COURSES

AE. 699.—Research and Master's Thesis. 0 to 6 credits.*

For students working for the master's degree. Credits cannot be used to reduce the total course work required for the degree.

*Credit assigned must be shown on course assignment card.

ART

ART 105.—Art Laboratory. 3 credits.

8:10-10:20 Daily C 105 PURSER, S. R.

An opportunity for students to work at various art processes such as painting, modeling, sculpture and the like. For non-Art majors.

ART 123.—Color and Design. 3 credits.

10:30-12:40 Daily C 103 KACERE, J. C.

A study of the elements and principles of design as a means of developing graphic expression on a two-dimensional surface.

ART 124.—Drawing and Visual Perception. 3 credits.

10:30-12:40 Daily C 101 EBERSOLE, R. P.

Creative drawing with an emphasis on developing visual perception, physical coordination, awareness of media, and individual creativity.

ART. 226.—Pictorial Composition. 3 credits. Prerequisite: ART 123

8:10-10:20 Daily C 100 COVINGTON, H. W.

The use of design principles in expressing ideas. Oil paint is the principal medium.

ART 290.—Art Survey. 3 credits.

9:20 Daily X 4 GRISSOM, E. E.

An introduction to important examples of painting, sculpture, architecture and related arts from 4000 B. C. to contemporary art movements.

ART 301.—Design I. 3 credits. Prerequisite: ART 226.

8:10-10:20 Daily C 105 PURSER, S. R.

An investigation of color, line and design, and their relationship to pictorial composition. Problems will be based upon organization of the picture plane and will be developed through the various phases of watercolor techniques as media for visual expression.

ART 302.—Design II. 3 credits. Prerequisite: ART 301.

8:10-10:20 Daily C 105 PURSER, S. R.

A continuation of ART 301, with emphasis on individual experimentation in the various water media.

ART 311.—Freehand Drawing I. 3 credits. Prerequisite: ART 124.

10:30-12:40 Daily C 101 EBERSOLE, R. P.

Drawing with emphasis on the relationship of the structure of the figure to its movement.

ART 312.—Freehand Drawing II. 3 credits. Prerequisite: ART 311.

10:30-12:40 Daily C 101 EBERSOLE, R. P.

A continuation of ART 311.

ART. 330.—Patternmaking. 3 credits.

8:10-10:20 Daily X 13 BORGIA, A. P.

Fundamental principles of flat pattern designing by use of basic foundation patterns in various scale measurements.

ART 338.—Draping. 3 credits.
10:30-12:40 Daily X 13 BORGIA, A. P.

Introduction of principles of designing patterns by use of dress forms.

ART 341.—Elementary Photography. 3 credits.
8:10-10:20 Daily X 12 EBERSOLE, R. P.

Fundamental course in camera operation and dark room technique with practical applications in the field of education.

ART 351.—Painting I. 3 credits.
8:10-10:20 Daily C 100 COVINGTON, H. W.

Various projects in painting based on the needs of the individual students as ascertained by conferences with the instructor.

ART 352.—Painting II. 3 credits. Prerequisite: ART 351.
8:10-10:20 Daily C 101 COVINGTON, H. W.

A continuation of ART 351.

ART 403.—Design III. 3 credits. Prerequisite: ART 302.
10:30-12:40 Daily C 103 KACERE, J. C.

Exploration of the design problem with emphasis upon the development of the expressive potential of the individual.

ART 404.—Design IV. 3 credits. Prerequisite: ART 403.
10:30-12:40 Daily C 103 KACERE, J. C.

Continuation of ART 403. A fuller consideration of select problems is used in the search for a personal expression.

ART 413.—Freehand Drawing III. 3 credits. Prerequisite: ART 312.
10:30-12:40 Daily C 101 EBERSOLE, R. P.

Further study of the human head and figure with emphasis upon creative interpretation of the gestures, weights, and contours of the figure.

ART 453.—Painting III. 6 credits. Prerequisite: ART 352.
8:10-12:40 Daily C 100 COVINGTON, H. W.

A continuation of ART 352 with emphasis on the creative individuality of the students.

ART 454.—Painting IV. 6 credits. Prerequisite: ART 453.
8:10-12:40 Daily C 100 COVINGTON, H. W.

A continuation of ART 453 with emphasis on the acquisition of more professional attitudes and abilities.

ART 494.—Modern Art. 3 credits.
7:00 Daily X 4 GRISSOM, E. E.

The history of Art from 1850 and the development of Art leading to movements such as Fauvism, Cubism, futurism, expressionism, etc.

GRADUATE COURSES

ART 651-652-653-654.—Art Problems in Painting and Drawing. 3 credits.
Hours to arrange. X 1 KACERE, J. C.

Under the guidance of the instructor, the student will plan and execute a series of projects related to the field of painting.

ART 655-656-657-658.—Art Research in Painting and Drawing. 3 credits.
Hours to arrange X 1 KACERE, J. C.

An opportunity for advanced students in painting to investigate technical processes that can be adapted to problems of a varied nature.

ART 699.—Research and Master's Thesis. 0 to 6 credits.*

For students working for the Master's Degree.

*Credit assigned must be shown on course assignment card.

ASTRONOMY

ATY 141.—Descriptive Astronomy. 3 credits. Not open to students who have had any other course in astronomy.
8:10 Daily WAL 202

An elementary survey of the astronomical universe with a minimum of mathematical work. Primarily intended as an elective for those not majoring in a physical science or mathematics. Occasional observing periods with the telescope and demonstrations with the Spitz Planetarium.

BACTERIOLOGY

BCY. 300.—Bacteria in Everyday Life. 3 credits. Prerequisite: C-61 or equivalent.
8:10 M T W Th MCC 166 CARROLL, W. R. and TYLER, M. E.
Laboratory 12:50 to 3:00 T Th MCC 167 CARROLL, W. R.

Bacteria in relation to evolution, higher plants and animals, and particularly man. Their functions in the cycle of chemical transformations, in food production, in disease, and in general sanitation. The related activities of some yeasts and molds, and of the filterable disease agents. A terminal course, not acceptable for admission to advanced courses in bacteriology. Available for minor credit to graduate students in non-science curricula only.

GRADUATE COURSES

BCY. 600.—Public Health Microbiology. Variable credit.*
To arrange Jacksonville.** BUREAU OF LABORATORIES STAFF

Principles and methods in diagnostic public health microbiology.

BCY. 699.—Research and Master's Thesis. 0-6 credits.*

BCY. 799.—Research and Doctoral Dissertation. 1-6 credits.*

*Credit assigned must be shown on course assignment card.
**Course given at Bureau of Laboratories, State Board of Health, Jacksonville.

BIOLOGY

BLY. 161.—Biology Laboratory. 2 credits. Prerequisite or corequisite: C-61.
8:10 to 10:20 M T W Th J 101 KILBY, J. D.

An introductory laboratory course dealing with cells, mammalian anatomy, the major groups of plants, methods of reproduction and germ cell formation.

BLY. 162.—Biology Laboratory. 2 credits. Prerequisite or corequisite: C-62.
10:30 to 12:40 M T W Th J 202 LEAVITT, B. B.

An introductory laboratory course dealing with genetics, homology, embryology, evolution, taxonomy and ecology.
(BLY. 161 and 162 are prerequisites for most of the other courses in this department).

BLY. 210.—Vertebrate Embryology. 4 credits. Prerequisites: BLY. 161 and 162.
Lecture: 12:50 M T W Th FLI 101
Laboratory: 2:00 to 5:20 M T W Th J 201

Lectures on the embryology of the various groups of chordate animals are accompanied by laboratory work dealing chiefly with the frog, chick and pig.

BLY. 300.—Common Animals and Plants of Florida. 3 credits. Prerequisite: C-6.
(Register for Lecture Section, one Laboratory Section and Field Work.)
Lecture Section: 12:50 M W FLI 102 LAESSLE, A. M.
Laboratory Sections:
11: 2:00 to 5:20 M W FLI 2
12: 12:50 to 4:10 T Th FLI 2
Field Work: 5 hours To Arrange

Designed to provide a recognition of and an acquaintance with some of the more common animals and plants of Florida. Individual work in the field and the making of a personal reference collection of plants and animals is encouraged.

BLY. 303.—Birds of Florida. 3 credits. Prerequisite: C-6.
Lecture Section: 12:50 T Th FLI 109 WESTFALL, M. J.
Laboratory Section: 2:00 to 5:20 T Th FLI 14
Field Work: 5 hours To arrange

Designed to acquaint students with the bird life of Florida. Particular attention is given to the recognition and identification of the local birds.

BLY. 430.—Individual Studies in Animal Biology. 3 credits. Prerequisite: At least fourteen hours in approved major courses in biology, and consent of instructor. May be repeated for full credit.
To arrange STAFF

Qualified students and the instructor concerned may choose a particular topic or problem for study.

GRADUATE COURSES

BLY. 630.—Individual Studies in Animal Biology. Hours and credits to be arranged. Prerequisite: Graduate status and consent of the instructor.
To arrange STAFF

Studies may be chosen from one or more aspects of the following fields: Comparative Anatomy, Cytology, Ecology, Embryology, Experimental Biology, Fresh Water Biology, Game Management, Genetics, Herpetology, Histology, Ichthyology, Invertebrate Zoology including Arachnology and Insect Biology, Limnology, Malacology, Mammalogy, Marine Biology, Ornithology, Parasitology, General or Comparative Physiology, Protozoology, Vertebrate Paleozoology, and Zoogeography.
BLY. 630 may be elected for additional credit in subsequent semesters.

BLY. 666.—Biometrics. 3 credits.
Prerequisite: Ms. 310.
To arrange WALLBRUNN, H. M.

Application of standard statistical procedures to biological problems.

BLY. 690.—Special Topics in Biology. 3 credits. Prerequisite: Graduate status and consent of the instructor.
To arrange STAFF

Special topics will be studied with small interested groups of students. The planned topics are: Physiological Genetics, Population Genetics, Taxonomy and Natural History of Arthropods.
BLY. 690 may be elected for additional credit repeatedly providing there is a change of topic.

BLY. 699.—Research and Master's Thesis. 0 to 6 credits.*

BLY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

*Credit assigned must be shown on registration blank.

BOTANY

BTY. 101.—General Botany. 3 credits.
8:10 T W Th F McC 5 POWELL, R. D.
Laboratory: 12:50-3:00 T Th McC 317

The form, structure, growth, reproduction and physiology of plants and their various organs.

COURSE FOR ADVANCED UNDERGRADUATES AND GRADUATES

BTY. 500.—Plant Geography. 3 credits. Prerequisites: BTY. 306 and BTY. 401.
10:30 M T Th F McC 326 DAVIS, J. H.
Laboratory: 12:50-5:20 W McC 326

Distribution of the important kinds of flora throughout the world, with particular emphasis on the relations of these to geographical, climatic, soil, and human factors.

GRADUATE COURSES

BTY. 600.—Problems in Botany. 1-4 credits.*
To arrange STAFF

Problems in one or more of the fields of botany, taxonomy, physiology, ecology and plant geography, and morphology and anatomy, depending on the requirements of graduate minor of graduate students in botany.

BTY. 699.—Research and Master's Thesis. 0-6 credits.*

*Credit assigned must be shown on course assignment card.

BUILDING CONSTRUCTION

BCN. 412-413-414.—Projects in Building Construction, Group 4. 3 credits each;—group total, 12 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series BCN. 401-402-403-404-411.
To arrange K 203

NOTE: A limited amount of remedial work will be offered to permit makeup in courses failed during the regular semester. Registration will be permitted only upon securing the written approval of the Head of the Department.

GRADUATE COURSES

BCN. 601.—Building Construction. 3 or 6 credits. Prerequisite: Bachelor's degree in Building Construction or equivalent.
To arrange K 102

Advanced studies in building technology or in specialized areas of the building construction field selected by the student and approved by the faculty.

BCN. 603.—Building Research. 3 or 6 credits.
Prerequisite: Bachelor's degree in Building Construction or equivalent.
To arrange K 102

Detailed investigation of a selected problem in the building construction field designed to make a significant contribution to present knowledge and practices in that field.

BCN. 699.—Research and Master's Thesis. 0 to 6 credits.*

For students working for the Master's degree. Credits cannot be used to reduce the total course work required for the degree.
*Credit assigned must be shown on course assignment card.

BUSINESS EDUCATION

BEN. 81.—Introductory Typewriting. 2 credits.
8:10 Daily and 2 hours to arrange YON 306 BABB, E. M.

Skill in typewriting developed through practice on personal and business problems.

BEN. 91.—Introductory Shorthand. 3 credits.
9:20 Daily and 2 hours to arrange YON 305 BABB, E. M.

The theory of Gregg shorthand is completed, using the functional method.

BEN. 181.—Advanced Typewriting. 2 credits. Prerequisite: BEN. 81 or BEN. 82 or permission of department.
10:30 Daily and 2 hours to arrange YON 306 BABB, E. M.

Provides more intensive training in typewriting.

BEN. 191.—Shorthand Dictation. 3 credits. Prerequisite: BEN. 91 or BEN. 92 or permission of department.
11:40 Daily and 2 hours to arrange YON 305 BABB, E. M.

Dictation developed; emphasis on speed, accuracy, and shorthand skills.

BEN. 291.—Shorthand Dictation and Transcription. 3 credits. Prerequisites: BEN. 181 and 191, or permission of department.

12:50 Daily and 4 hours to arrange YON 306 BABB, E. M.

Dictation and transcription are emphasized.

GRADUATE COURSES

BEN. 662.—Teaching Secretarial Subjects. 3 credits.

9:20 Daily YON 306 LOYD, J. W.

The curriculum, materials and methods of teaching secretarial subjects are included.

BEN. 664.—Methods and Materials in General Business. 3 credits.

10:30 Daily YON 305 LOYD, J. W.

The objectives, content, resource materials and methods of teaching general business in the junior and senior high school are included.

BEN. 705.—Seminar in Business Education. 6 credits. Prerequisite: permission of department.

6 hours seminar and 38 hours laboratory to arrange.

YON 308 MOORMAN, J. H.

A work experience seminar. The purpose is to make applications of office experience to teaching materials and techniques in the high school.

BEN. 775.—Administration and Supervision of Business Education. 3 credits. Prerequisite: 2 years teaching experience and permission of department.

2:00 Daily YON 305 LOYD, J. W.

Problems and duties of the supervisor and department head are emphasized.

BUSINESS ORGANIZATION AND OPERATION

BS. 231.—Principles of Marketing. 3 credits. Prerequisite: ES. 201.

11:40 Daily MAT 102 BUTTERWORTH, J. D.

The institutions and methods developed for carrying on trade operations; retail and wholesale agencies; elements of marketing efficiency; the cost of marketing; price maintenance; unfair competition; the relation of the government to marketing.

BS. 233.—Salesmanship. 3 credits.

9:20 Daily MAT 213 THOMPSON, R. B.

An introduction to selling. Analysis of types, stages and problems of psychology of Sale situations.

BS. 260.—Fundamentals of Insurance. 3 credits.

9:20 Daily MAT 113

The basic fundamentals underlying the business of insurance as a prerequisite for more advanced and detailed work in the subject designed to serve two distinct needs: (1) to give students of economics and commerce a general knowledge of the subject; and (2) to lay a foundation for the future work of those interested in entering the business.

BS. 271.—Principles of Management. 3 credits.

8:10 Daily MAT 111 TRAXLER, R. N.

The basic fundamentals of management underlying the solution of problems of organization and operation of business enterprises. Application of these fundamentals to specific fields of industrial management such as production, material, personnel, purchasing, etc.

BS. 336.—Credits and Collections. 3 credits.

11:40 Daily MAT 8 YODER, L. C.

Retail and mercantile credit; the principles that guide a creditor both in the acceptance of risk and the collections that must follow; credit department operation.

BS. 363.—Life Insurance: Elements. 3 credits.

11:40 Daily MAT 113

All types of policies issued by commercial carriers, with emphasis upon individual, family, and business needs; historical background and development, premium and reserve computations; types, organization, and operation of carriers; legal aspects of life insurance; regulation and control. Designed as basic course for students who may become either sellers or buyers of life insurance.

BS. 365.—Fire Insurance. 3 credits.
8:10 Daily MAT 113 CLINE, R. S.

The principles and practices of the coverage of losses due to fire; the fire insurance contract; insurable interest; endorsements; settlement and adjustment of losses; co-insurance; non-concurrence; rates; reserves, consequential losses; reinsurance.

BS. 373.—Personnel Management. 3 credits.
10:30 Daily MAT 111 TRAXLER, R. N.

A comparison of the critical evaluation of public and private personnel practices and techniques of recruiting, selecting, transferring, promoting, classifying, and training workers. Attention is centered on the problem of training to fit workers for the different types and levels of duties called for by the government, by industry and by other types of business enterprises. Consideration of organization, policies, and procedures of managing men.

BS. 401.—Business Law. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily MAT 8 GAITANIS, L. A.
Section 2. 10:30 Daily MAT 8

Contracts: Nature; kinds; agreement; genuineness of assent; consideration; legality; capacity; third parties; discharge; remedies. Agency: Nature; creation; principal and agent; rights and liabilities of third parties; termination. Negotiable Instruments: Nature; kinds; parties; transfer; holders; defenses; discharge.

BS. 402.—Business Law. 3 credits. Prerequisite: BS. 401.
9:20 Daily MAT 222

Personal Property: Nature; classification; acquisition of title. Bailments: Nature; classification; termination; pledges and pawns. Carriers: Nature; classification; duties; liabilities. Sales: Nature; formality; transfer of title; warranties; liabilities; rights; remedies; conditional sales. Corporations; Nature; creation; classification; powers; stock; management; rights; liabilities. Partnership: Nature; creation; duties; rights; remedies; liabilities.

BS. 422.—Investments. 3 credits. Prerequisite: BS. 427.
9:20 Daily MAT 219 McFERRIN, J. B.

The nature of investments; investment policies and types of securities; analysis of securities; the mechanics and mathematics of security purchases; factors influencing general movements of security prices.

BS. 427.—Corporation Finance. 3 credits.
9:20 Daily MAT 216

The economic and legal forms of business enterprise; the instruments of business finance; financial problems as they relate to the ordinary operations of the business involving fixed and working capital, income, dividend policy, and current borrowing.

BS. 433.—Advertising. 3 credits.
10:30 Daily MAT 105 YODER, L. C.

A comprehensive guide to the planning and preparation of modern advertising in all of its phases.

BS. 437.—Retailing. 3 credits. Prerequisite: BS. 231.
9:20 Daily MAT 8 BUTTERWORTH, J. D.

The fundamentals of retailing: problems, policies, trends and procedures in retail distribution.

BS. 463.—Social Insurance. 3 credits.
10:30 Daily MAT 113 CLINE, R. S.

An analysis of the meaning and nature of economic security; the distinctions between social and private insurance; the basic hazards of unemployment, old-age, premature death of breadwinner, sickness and disability, especially as they apply to low income groups; an evaluation of methods for eliminating, reducing or indemnifying these hazards; the development of Social Insurance in the United States, the existing programs including operations, with special emphasis on Title II (Old Age and Survivors Insurance) of the Social Security Act and Florida's Unemployment Compensation and Workmen's Compensation programs.

BS. 471.—Principles of Organization. 3 credits.
11:40 Daily MAT 111

Includes coordinative, scalar, functional and staff phases of government, military, church and finally industry whose internal and external problems are considered in their application to leadership.

GRADUATE COURSES

BS. 635.—Advanced Marketing Principles. 3 credits.
M 2:00-5:00, Th 12:00-2:00 LIB 417 THOMPSON, R. B.

An advanced analysis of principles, theories and problems in marketing. Consideration is given to the functional, institutional, cost, and historical approaches from both the social and firm points of view.

BS. 675.—Management Problems. 3 credits.
To arrange

Deals with specific current industrial problems in the fields of administration, production, finance, personnel, labor relations, purchasing and distribution. Problems are selected from technical magazines in the management fields, and from contacts with key operating personnel in industry.

BS. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

Directed research and writing for the master's degree, taken toward the end of the student's graduate program for credit in addition to the 24 hours required for the master's degree.

BS. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange

Directed research and writing for the Ph.D. degree, taken toward the end of the student's graduate program for credit in addition to the hours of regular courses required by the candidate's supervisory committee for the doctor's degree.
*Credit assigned must be shown on course assignment card.

CANCER RESEARCH

GRADUATE COURSES

CR. 666.—Cancer Research Seminar. 1 to 3 credits.*
8:10-11:30 T CRL

Discussion of the work of the Cancer Research Laboratory. Papers on current literature. Presentation of theses.

CR. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

CR. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange

*Variable, Credit assigned must be shown on course assignment card.

CHEMICAL ENGINEERING

CG. 347.—Industrial Stoichiometry. 4 credits. Prerequisite: CY. 331. Corequisite: MS. 354, PS. 206.
10:30 Daily MIL 25 TYNER, M.
Laboratory 2:00 to 5:20 M W N 205

Industrial processes and calculations, weight balances, gas calculations, combustion processes, vapor pressure, humidity, etc.

CG. 356.—Principles of Chemical Engineering II. 3 credits. Prerequisite: CG. 355.
9:20 Daily MIL 25 HUCKABA, C. E.

The fundamental chemical engineering operations: Flow of fluids, heat transfer, evaporation, humidity and air conditioning and drying.

CG. 361.—Materials of Engineering. 3 credits. Prerequisite: CY. 218.
10:30 Daily MIL 24 SCHWEYER, H. E.

Production, properties and uses of ferrous and non-ferrous metals and alloys, Portland cement, clay products, wood and plastics.

CG. 364.—Chemical Engineering Thermodynamics I. 3 credits. Prerequisite: MS. 354. Corequisites: CY. 402, CG. 356.
8:10 Daily MIL 25 REED, T. M.

The first two laws of thermodynamics and their application to Chemical Engineering.

GRADUATE COURSES

CG. 699.—Research and Master's Thesis. 0 to 6 credits.*

CG. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

*Credit assigned must be shown on course assignment card.

CHEMISTRY

CY. 121.—General Chemistry. 4 credits.
(Register for the Lecture Section, and one Laboratory Section)
Lecture Section 1: 7:00 Daily LEI 207
Laboratory Sections:
Section 111 12:50-4:10 M W LEI 138
Section 112 12:50-4:10 M W LEI 138

Fundamental laws and theories of chemistry. Non-metallic elements and their compounds; metals and their compounds and some of their uses.

CY. 122.—General Chemistry. 4 credits.
(Register for the Lecture Section, and one Laboratory Section)
Lecture Section 1: 9:20 Daily LEI 207
Laboratory Sections:
Section 111 12:50-4:10 T Th LEI 138
Section 112 12:50-4:10 T Th LEI 138

The second half of the course CY. 121-122.

CY. 123.—Qualitative Analysis. 3 credits. Prerequisite: CY. 122.
(Register for the Lecture Section and one Laboratory Section)
Lecture Section 1: 10:30 M T Th F LEI 207 PEARCE, J. M.
Laboratory Sections:
Section 111 12:50-4:10 T Th LEI 236
Section 112 12:50-4:10 T Th LEI 236

Theoretical principles and laboratory techniques involved in the qualitative detection of the common metals and acid radicals.

CY. 217.—General Chemistry and Qualitative Analysis. 4 credits. Prerequisites: Upper percentile rating in placement tests in physical sciences and mathematics or satisfactory completion of C-2. In general, freshman should present evidence that they have had high school chemistry. Prerequisite or corequisite: MS. 105.
(Register for the Lecture Section and the Laboratory Section)
Lecture Section: 11:40 Daily LEI 207
Laboratory Section: 12:50-4:10 T Th LEI 136

A course in general chemistry including the fundamentals of qualitative analysis.

CY. 218.—General Chemistry and Qualitative Analysis. 4 credits.
(Register for the Lecture Section and one Laboratory Section)
Lecture Section 1: 8:10 Daily LEI 207
Laboratory Sections:
Section 111 12:50-4:10 M W LEI 136
Section 112 12:50-4:10 M W LEI 136

The second half of the course CY. 217-218.

CY. 302.—Organic Chemistry. 4 credits.
(Register for the Lecture Section and one Laboratory Section)
Lecture Section 1: 9:20 Daily LEI 142 BUTLER, G. B.

Laboratory Sections:
Section 111 12:50-4:10 W F LEI 238
Section 112 12:50-4:10 T Th LEI 238

The second half of the course CY. 301-302.

CY. 331.—Introductory Quantitative Analysis. 4 credits. Prerequisite: CY. 123 or CY. 218.
(Register for the Lecture Section and the Laboratory Section)
Lecture Section: 8:10 M T W Th LEI 142
Laboratory Section 12:50-4:10 M T W Th LEI 112

Theoretical principles and laboratory technique involved in quantitative determinations. Determinations include gravimetry, acidimetry and alkalimetry, oxidimetry and iodimetry.

CY. 362.—Organic Chemistry. 3 credits. Prerequisite: CY. 122 or CY. 218. Corequisite: CY. 363, except for Physics majors.
8:10 Daily LEI 118

A brief elementary course embracing the more important aliphatic and aromatic compounds.

CY. 363.—Organic Chemistry Laboratory. 2 credits. Corequisite: CY. 362.
12:50-4:10 T W Th F LEI 238

CY. 400.—Chemistry for Teachers. 6 credits. Prerequisite: 1 year of college chemistry.
12:50 Daily LEI 207 THOMAS, G. A.
Other time to arrange

This course is designed primarily for teachers who wish to expand either their background in Chemistry or to refresh themselves with a modern approach. It will consist of a combination of lecture and laboratory work, reviewing fundamentals of Chemistry and stressing recent developments and techniques in the field.

CY. 402.—Physical Chemistry. 3 credits. Prerequisite: CY. 401. Corequisite: CY. 406, except for Physics Majors.
9:20 Daily LEI 212 REID, C. E.

Colloids, electricity as applied in chemistry, chemical kinetics, photo-chemistry and introduction to quantum theory.

CY. 406.—Physical Chemistry. 1 credit. Corequisite: CY. 402.
12:50-4:10 T Th LEI 204

GRADUATE COURSES

CY. 606.—Advanced Organic Chemistry. 3 credits. Prerequisite: CY. 623.
10:40 Daily LEI 212 JONES, W. M.

Correlation of organic chemical reaction types with emphasis upon electronic displacement effects, carbonium ion reactions, radical reactions, displacement reactions and elimination reactions.

CY. 699.—Research and Master's Thesis. 0 to 6 credits.*

CY. 721.—Theory of Molecular Structure. 3 credits. Prerequisites: CY. 623 and PS. 612.

8:10 Daily LEI 212 BREY, W. S.

Mathematical treatment of valence bonding and molecular structure. Heitler-London and molecular orbital methods.

CY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

*Credit assigned must be shown on course assignment card.

CIVIL ENGINEERING

CL. 223.—Surveying. 3 credits. Prerequisite: MS. 105.

(Register for the Lecture Section and one Laboratory Section)

Lecture Section 8:10 M T W Th ENG 432 WINSOR, A. N.

Laboratory Sections:

Section 11 2:00 to 5:20 M W ENG 320 WINSOR, A. N.

Section 12 2:00 to 5:20 T Th ENG 432 WINSOR, A. N.

Use of surveyors tape; level and transit; traversing and balancing surveys; calculation of areas; topographic mapping; land subdivision; adjustment of instruments.

CL. 226.—Higher Surveying. 2 credits. Prerequisite: CL. 223.

12:50 M W ENG 432 WINSOR, A. N.

Laboratory 2:00 to 5:20 T Th ENG 324 WINSOR, A. N.

Triangulation systems; precise base-line measurement; map projections; coordinate systems; precise levels; line azimuth by Solar and Polaris observations; hydrographic surveys; introduction to photogrammetry; horizontal curves; cross-sections.

CL. 326.—Statics of Simple Structures. 4 credits. Prerequisite: EM. 365.

10:30 Daily ENG 324

Laboratory 2:00 to 5:20 M W ENG 324

Application of the methods of statics to structural analysis; a correlation between graphical and analytical methods; moments, shears, reactions, resultants, stress diagrams, and influence lines for statically determinate structures.

GRADUATE COURSES

CL. 623.—Advanced Concrete Structures. 3 credits. Prerequisite: CL. 433.

To arrange KLUGE, R. W.

Study of research in reinforced concrete particularly in connection with development of building code requirements; ultimate load theories and their application to design; prestressing; special design problems.

CL. 630.—Problems in Sanitation. 3 credits. Prerequisites: CL. 329, CL. 429 or permission of instructor.

To arrange GILCREAS, F. W.

Approved problems for study or research selected from any field of sanitary specialization.

CL. 699.—Research and Master's Thesis. 0-6 credits.*

CL. 799.—Research and Doctoral Dissertation. 1-6 credits.*

*Credit assigned must be shown on course assignment card.

COMMUNICATIONS

COM. 212.—Radio and Television Announcing. 3 credits.

8:10 to 10:30 Daily STA 316

Principles and practice in announcing, narrating, and acting for broadcasting.

COM. 430.—Individual Problems. 3 credits.
To arrange

GRADUATE COURSE

COM. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

*Credit assigned must be shown on course assignment card.

DAIRY SCIENCE

DY. 420.—Problems in Dairy Technology. 3 credits.
To arrange

Qualified students may choose an approved problem covering some phase of dairy technology.

GRADUATE COURSES

DY. 623.—Problems in Dairy Production. Variable credit.*
To arrange

Research for majors in dairy husbandry.

DY. 627.—Advanced Dairy Microbiology. 4 credits.
To arrange WILKOWSKE, H. H.

Advanced methods of microbiological control of dairy products.

DY. 699.—Research and Master's Thesis. 0 to 6 credits.*

*Credit assigned must be shown on course assignment card.

ECONOMICS

ES. 201.—Basic Economics. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily MAT 216
Section 2. 10:30 Daily MAT 102 KARP, J. R.
Section 3. 11:40 Daily MAT 105 SIEVERS, A. M.

After a preliminary discussion of the nature of economics and economic concepts and institutions, this half of the course, ES. 201-202, emphasizes the accounting, analytical, and policy aspects of national income and product, along with such closely related topics as governmental finance, money and banking, and international trade and finance.

ES. 202.—Basic Economics. 3 credits.
(Register for one section only.)
Section 1. 7:00 Daily MAT 216 SMITH, C. D.
Section 2. 8:10 Daily MAT 10 QUALLS, L. L.

This half of the course in Basic Economics, ES. 201-202, deals primarily with the theories of production, determination of prices and distribution of income in both regulated and unregulated industries. Some attention is also given to the problems of industrial relations, monopolies, and to comparative economic systems.

ES. 203.—Elementary Statistics. 4 credits. Prerequisite: C-42 or equivalent.
10:30 Daily MAT 118 LASSITER, R. L.
1:00-3:10 T Th MAT 120

The statistical method as a tool for examining and interpreting data; acquaintance with such fundamental techniques as find application in business, economics, biology, agriculture, psychology, sociology, etc.; basic preparation for more extensive work in the field of statistics.

ES. 210.—Machine Technology in American Life. 3 credits.
10:30 Daily MAT 222 WEBB, J. N.

Shift from agrarian to industrial economy; development of machine technology and mass production; finance capitalism; impact of technological change on cultural pattern; class stratification and conflicts; relation of technology to nationalism and internationalism.

ES. 246.—Consumer Economics. 3 credits.
8:10 Daily MAT 219 SHIELDS, M. W.

A study of consumer buying practices, management of personal and family finances, spending the income wisely, consideration of buying guides and consumer protection agencies.

ES. 321.—Money and Banking. 3 credits. Prerequisite: ES. 201.
8:10 Daily MAT 102 SMITH, C. D.

A study of money systems and standards; of the factors determining the size of the money supply with special emphasis on the role of commercial and central banks and government fiscal policy; and of the relationship between money, prices and production and employment.

ES. 327.—Public Finance. 3 credits. Prerequisite: ES. 201.
10:30 Daily MAT 10 QUALLS, L. L.

Principles governing expenditures of modern government; sources of revenue; public credit; principles and methods of taxation and financial administration as revealed in the fiscal systems of leading countries.

ES. 347.—Principles of Foreign Trade. 3 credits. Prerequisite: ES. 201.
11:40 Daily MAT 115 KOEFOD, P. E.

Fundamental principles of foreign trade; significance of geographic, economic, social, and political influences; current practices and development in foreign trade; products of international commerce, protective tariffs, and other barriers to world trade; tendencies in the foreign trade of the United States.

ES. 372.—Labor Problems. 3 credits. Prerequisite: ES. 202.
9:20 Daily MAT 111 FRISTOE, C. W.

Labor problems; insecurity, wages and income, hours, sub-standard workers, industrial conflict, attempts to solve labor problems by employers; personnel management, employee representation, employers' associations; attempts to solve labor problems by state; protective labor legislation, laws relating to settlement of industrial disputes.

ES. 407.—Economic Principles and Problems. 3 credits. Prerequisites: ES. 201-202.
11:40 Daily MAT 10 LASSITER, R. L.

An advanced course in economic theory, dealing especially with the theories of production, price determination, and income distribution and their application to a selected list of current economic problems.

ES. 408.—Economic Principles and Problems. 3 credits. The second half of the course ES. 407-408.
9:20 Daily MAT 10 SIEVERS, A. M.

ES. 409.—Comparative Economic Systems. 3 credits.
10:30 Daily MAT 213 BLODGETT, R. H.

The economics of capitalism, socialism, communism, and fascism. The theoretical economics of capitalism, socialism, and communism, and the actual economics of the United States, Soviet Russia, England, Nazi Germany, and Fascist Italy are compared on the basis of such matters as industrial production, agriculture, exchange, credit and banking, income distribution, the status of labor, and international trade. Marxian Socialism is also considered briefly.

ES. 429.—Introduction to Business Cycles. 3 credits. Prerequisite: ES. 321.
8:10 Daily MAT 213 KARP, J. R.

An introduction to the principal theories of the business cycle including also a description of the various types of cycles and an examination of the important remedies that have been proposed.

GRADUATE COURSES

ES. 608.—Present-day Schools of Economic Thought, Part I. 3 credits.
8:10 Daily MAT 222 WEBB, J. N.

The purpose of this course is to examine the main currents of contemporary American and English economic thinking with particular reference to the developments occurring between the two World Wars. The writings of Hansen, Mitchell, Clark, and Commons, in the United States, and of Keynes, Cole, Robinson, and Hobson in England will be examined.

ES. 643.—Theory of International Trade. 3 credits.
T 9:30-12:30, Th 9:30-11:30 LIB 417 SHIELDS, M. W.

The historical and economic background of foreign trade; the theory of international trade; the fundamentals of international exchange; international commercial policies and international trade; exchange fluctuations and their control; the international monetary institutions.

ES. 674.—Labor Economics. 3 credits.
W 10:30-12:30, F 10:30-1:30 LIB 417 FRISTOE, C. W.

The seminar in wage theory has for its purpose an intensive and advanced study of the various theories of wage determination and the economic role of wages in the economy.

ES. 677.—Governmental Debt. 3 credits.
To arrange DONOVAN, C. H.

Influences and mechanisms for debt incurrence and retirement by federal, state, and local governments. Problems of debt use and abuse, regulations, area planning, and intergovernmental relations. Emphasizes case studies.

ES. 691.—Neo-Classical Economics. 3 credits.
T 2:00-5:00, Th 2:30-4:30 LIB 417 BLODGETT, R. H.

Analysis, criticism, and restatement of neo-classical price and production theories. Demand, supply, cost of production, and price determination under various conditions of the market will be considered. The writings of Marshall, Hicks, Boulding, Davenport, Stigler, Fellner, J. Robinson, and Chamberlain provide the background for the discussion.

ES. 699.—Research and Thesis. 0 to 6 credit hours.*
To arrange

Directed research and writing for the M. A. degree, taken toward the end of the student's graduate program for credit in addition to the 24 hours required for the master's degree.

ES. 799.—Research and Dissertation. 1 to 6 credit hours.*
To arrange

Directed research and writing for the Ph.D. degree, taken toward the end of the student's graduate program for credit in addition to the hours of regular courses required by the candidate's supervisory committee for the doctor's degree.
*Credit assigned must be shown on course assignment card.

EDUCATION—GENERAL

ED. 418.—Audio-Visual Materials of Instruction. 3 credits.
8:10 Daily YON 222 Mc KAY, J. H.

A general course for teachers at all grade levels. Presents sources and methods of using audio-visual materials of instruction.

GRADUATE COURSES

NOTE: Orientation Meeting for all graduate students in Education, Thursday, June 20, 7:00 p.m., in Yonge Auditorium. This meeting will be devoted to a discussion of policies and programs for graduate students in the College of Education.

ED. 630.—Individual Work. 3 credits.
To arrange YON 134B WILES, K.

ED. 631.—Educational Leadership I. 3 credits. (Must be taken with ED. 632.)
8:10 Daily YON 214 WILES, K., CURRAN, R. L., FOX, W. M., LEPS, J. M.

This is a basic leadership course recommended for majors in administration and supervision. Emphasis is given to the development, initiation, and implementation of programs and policies; to goal determination; and to human relationships. Research projects will center around leadership problems of administration and supervision.

ED. 632.—Educational Leadership II. 3 credits. (Must be taken with ED. 631.)
9:20 Daily YON 214 WILES, K., CURRAN, R. L., FOX, W. M., LEPS, J. M.

ED. 633.—Methods and Problems of Supervision. 3 credits. Prerequisite: ED. 631 or ED. 634.
10:30 Daily YON 236 WILES, K.

An analysis of supervisory practices used in improving instruction.

ED. 651.—Audio-Visual Education. 3 credits.
9:20 Daily YON 222 WINSOR, D.

The selection, evaluation and use of audio-visual materials, with emphasis upon projected still and sound motion pictures.

ED. 652.—Production and Utilization of Audio-Visual Materials. 3 credits. Prerequisite: ED. 651 or consent of instructor.
10:30 Daily YON 222 WINSOR, D.
Laboratory: To arrange

Designed to train materials supervisors, audio-visual coordinators, and other school personnel in the production of materials by photographic processes, and the operation of materials centers.

ED. 653.—Organization and Operation of a Materials-of-Instruction Program. 3 credits. Prerequisite: ED. 418 or ED. 651.
11:40 Daily YON 222 MC KAY, J. H.

A study of the problems of the administration of a materials-of-instruction program.

ED. 655.—Mental Health in the Classroom. 3 credits.
7:00 Daily YON 138

To assist teachers in the personality development of children.

ED. 659.—Laboratory in Corrective Reading. 6 credits. Prerequisite or corequisite: EDE. 675.
10:30-12:40 Daily AND 310 SPACHE, G.

Laboratory experience in the diagnosis, correction and prevention of reading difficulties.

ED. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange YON 134B WILES, K.

ED. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange YON 134B WILES, K.

*Credit assigned must be shown on course assignment card.

EDUCATION—ADMINISTRATION

GRADUATE COURSES

EDA. 600.—Educational Organization and Administration. 3 credits.
Section 1. 8:10 Daily I 102 MERRILL, E. C.
Section 2. 10:30 Daily YON 214 MERRILL, E. C.

EDA. 601.—Organization and Administration of Elementary Schools. 3 credits.
10:30 Daily I 202 WHITTIER, C. T.

EDA. 602.—Organization and Administration of Secondary Schools. 3 credits.
12:50 Daily YON 226 WHITTIER, C. T.

EDA. 603.—Public School Business Administration and Finance. 3 credits.
11:40 Daily YON 226 JOHNS, R. L.

EDA. 604.—Legal Phases of Public School Administration. 3 credits.
12:50 Daily YON 236 LEPS, J. M.

EDA. 609.—Problems in School Administration and Supervision. 3 credits.
To arrange YON 128 JOHNS, R. L.

EDA. 630.—Individual Work. 3 credits.
To arrange YON 128 LEPS, J. M.

EDA. 702.—The School Plant. 3 credits.
2:00 Daily YON 226 JOHNS, R. L.

EDA. 704.—College Administration. 3 credits
11:40 Daily I 103 HENDERSON, L.

EDUCATION—ELEMENTARY

EDE. 400.—Problems of Instruction. 3 credits.
10:30 Daily I 201 MURRAY, L. L.

The course in elementary curriculum required for certification to teach in grades 1-12 in certain specialized fields.

EDE. 550.—The Teaching of Arithmetic. 3 credits.
9:20 Daily I 201 COOPER, J.

The purpose of the course is to help teachers of elementary and junior high schools gain an understanding of arithmetic concepts, symbolism, and teaching materials and procedures.

EDE. 570.—Teaching of Reading. 3 credits.
Section 1 8:10 Daily I 201 HAIMBACH, D.

A comprehensive survey of the problems of teaching reading in all grades and practical procedures for attacking these problems.

EDE. 600.—Elementary School Curriculum. 3 credits.
Section 1 10:30 Daily I 102 COOPER, J.
Section 2 8:10 Daily I 107 MURRAY, L. L.

A survey of the content and methods of the elementary school curriculum. Offered primarily for students who have not taken a course in elementary curriculum and who have not had teaching experience in the elementary schools; also the first course in elementary curriculum for students majoring in administration.

EDE. 601.—Practices in Elementary Education, I. 3 credits.
Section 1. 10:30 Daily I 103 HAINES, A. C.
Section 2. 8:10 Daily YON 236 GREEN, E. K.

A study of practices in the elementary school in relation to fundamental principles of curriculum development. This is the basic elementary curriculum course for Master's programs in Elementary Education.

EDE. 602.—Practices in Elementary Education, II. 3 credits.
9:20 Daily YON 226 GREEN, E. K.

Emphasis is placed upon an interdisciplinary approach to problems in social learnings of elementary children.

EDE. 603.—Early Childhood Education, I. 3 credits.
8:10 Daily YON 138 MC CRACKEN, J.

To assist teachers of children of nursery school and kindergarten age.

EDE. 604.—Early Childhood Education, II. 3 credits.
To arrange YON 202 MC CRACKEN, J.

Problems in working with children in the nursery school and kindergarten.

EDE. 635.—Supervision of Pre-Service Teachers, I. 3 credits. Open to graduate students with certification and background in elementary education, or permission of instructor.

8:10 Daily I 103 HAINES, A. C.

Problems and issues of pre-service teacher education, with particular emphasis on procedures of supervising interns.

EDE. 660.—Science Education in the Elementary School. 3 credits. Prerequisite: EDE. 560. or equivalent, or permission of instructor.

11:40 Daily YON 142 BINGHAM, N. E.

Current problems in teaching science in elementary schools, new materials and techniques of teaching, recent developments in the sciences and their implications.

EDE. 670.—Language Arts in the Elementary School—Skills. 3 credits.

9:20 Daily I 107 CAREY, J.

Trends and practices in the teaching of reading, oral and written expression and listening.

EDE. 671.—Language Arts in the Elementary School—Creative Expression. 3 credits.

10:30 Daily I 107 CAREY, J.

Emphasis upon literature for young children and the arts related to it. These arts include illustrations, dramatization, puppetry, and other dramatic forms, story telling, creative writing, and evaluation and study of children's books in terms of their interests and needs.

EDE. 675.—Trends in the Teaching of Reading. 3 credits.

9:20 Daily YON 311 NESBITT, M.

Analysis of trends in the teaching of reading as shown in current methods and research. Includes consideration of purposes and aims, skills and attitudes, informal and formal reading tests.

EDE. 702.—Evaluation in the Elementary School. 3 credits.

11:40 Daily YON 228 BOYE, C.

Emphasis will be given to the appraisal of the behavioral growth of pupils. Some consideration to the evaluation of the total school program.

EDUCATION—FOUNDATIONS

EDF. 225.—Children and Culture. 3 credits.

Section 1. 8:10 Daily I 203 LEWIS, H. G.

Section 2. 10:30 Daily I 205 CURRAN, R. D.

A study of education as a function of the social setting.

EDF. 300.—History of Education in the United States. 3 credits.

11:40 Daily I 209 ANDERSON, A. W.

The historical development of our schools is traced with the implications of this development for the role of today's schools in its broad economic, sociological and psychological significance.

EDF. 360.—Elementary Statistical Methods in Education. 3 credits.

2:00 Daily YON 316 PHILLIPS, W.

Application of selected techniques to organization and interpretation of educational data.

EDF. 410.—Philosophy of Education. 3 credits.

9:20 Daily I 205 MUNTYAN, B.

A critical examination is made of various theories and philosophies of education, their relationships to the democratic principle, and their significance to the evolving system of education in the United States.

EDF. 440.—Child Development. 3 credits.

11:40 Daily YON 138

(Reserve time for observation during the forenoon.)

Growth and development of children into mature personalities.

EDF. 442.—Educational Psychology. 3 credits.
10:30 Daily YON 138 LANDSMAN, T.
(Reserve time for observation during the forenoon.)

Application of psychological principles to the educative process; individual differences; principles of learning; transfer of training; the nature of reasoning.

EDF. 450.—Measurement and Evaluation in Education. 3 credits.
12:50 Daily YON 138 ENGBRETSON, W. E.

Study of basic principles and methods of measurement; evaluation of pupil learning in school.

GRADUATE COURSES

EDF. 600.—History of Education. 3 credits.
10:30 Daily I 209 ANDERSON, A. W.

Attempt is made to evaluate present-day education by tracing back to their beginnings such dominant factors as the teacher, the curriculum, the school plant, and the sources of support and control for schools.

EDF. 610.—Democracy and Education. 3 credits.
Section 1. 8:10 Daily YON 311 BAKER, M. C.
Section 2. 9:20 Daily I 209 BROUDY, H.

A study of the reciprocal relationships of democracy and education.

EDF. 620.—Socio-Economic Foundations of Education. 3 credits.
Section 1. 11:40 Daily I 107 MUNTYAN, B.
Section 2. 9:20 Daily I 203 LEWIS, H. G.
Section 3. 8:10 Daily I 205 BROUDY, H.

The socio-economic bases for education are comprehensively surveyed.

EDF. 640.—Problems in Pupil Development and Learning. 3 or 6 credits.
Section 1. 3 credits. 9:20-11:30 Daily YON 43 GORDON, I. J. AND STAFF

Section 2. 6 credits. 9:20-11:30 Daily, 2:00-4:10 Daily YON 43 GORDON, I. J. AND STAFF

Study is made of problems of particular interest to students in the field of pupil growth and learning.

EDF. 641.—Educational Psychology—Personality Dynamics. 3 credits.
Section 1. 8:10 Daily YON 228 SNYGG, D.

An examination of the dynamics of behavior and its implication for education.

EDF. 642.—Educational Psychology—Problems. 3 credits.
Section 1. 10:30 Daily YON 232 KURTZ, J.

Individualized study of problems dealing with child development, adolescence, learning, and other areas of educational psychology.

EDF. 643.—Educational Psychology—Learning Theory. 3 credits.
7:00 Daily YON 316 SPEARS, W. D.

Different theories of learning will be studied and evaluated. The student will be expected to make a synthesis of the implications of these theories for teaching.

EDF. 650.—Measurement and Evaluation. 3 credits. Prerequisite: PSY. 211 or EDF. 360 and EDF. 450 or EDP. 613.
9:20 Daily YON 236 SPEARS, W. D.

Problems in test construction will be studied.

EDF. 660.—Educational Statistics. 3 credits. Prerequisite: EDF. 360 or an equivalent course or the approval of the instructor.
8:10 Daily YON 316 SCATES, D. E.

Statistical methods as applied to educational data and problems are systematically studied.

EDF. 712.—Contemporary Educational Theories. 3 credits.
12:50 Daily YON 232 BAKER, M. C.

A seminar for post-master's students. A critical study of contemporary philosophical theories of education.

EDF. 720.—School and Society. 3 credits.
2:00 Daily YON 232 HINES, V. A.

Provides a social and philosophic frame of reference through a rigorous study of the society in which education takes place, and the implications of this society for the functioning of the school. Conducted on a seminar basis. Limited to students in the sixth year program of teacher education and candidates for the doctor's degree in education.

EDF. 760.—Techniques of Research. 3 credits.
11:40 Daily YON 316 SCATES, D. E.

Training is given in identifying research problems, selecting and organizing useful means for research, methods of gathering data, and best practices for interpreting and reporting observed phenomena.

EDUCATION—PERSONNEL SERVICES

EDP. 300.—Principles and Practices for Teaching Exceptional Children. 3 credits. Prerequsiite: EDF. 245 or equivalent.
11:40 Daily YON 214 SOUTHWICK, S.

A study of exceptional children as commonly found in our schools. Consideration will be given to incidence, causes, diagnosis, agencies for referral, and recommended teaching procedures in respect to the blind, partially seeing, deaf, hard-of-hearing, speech defective, crippled, mentally retarded, mentally superior, and socially and emotionally disturbed children.

EDP. 500.—Materials and Methods for Teaching Slow Learners. 3 credits. Prerequisite: EDP. 300 or PSY. 312.
9:20 Daily YON 138 SOUTHWICK, S.

Programs will be constructed which will correlate skill subjects with the cores of interest. Curricular materials will be considered which can be used to teach children who are mentally handicapped at various maturation levels and in various situations. Classroom teachers would find this course helpful.

EDP. 503.—Methods of Teaching Crippled Children. 3 credits. Prerequisite: EDP. 300 or PSY. 312.
8:10 Daily I 209 MC CUTCHEN, K.

An analysis is made of academic difficulties and needs of crippled children. Agencies offering aid to these children are listed and their services discussed. Consideration is given to maintaining a normal school program for each child.

EDP. 506.—(Identical with SCH. 623. Register for SCH. 623.) Methods in Teaching the Deaf and Hard-of-Hearing. 3 credits.
12:50 Daily ADM 238 TEW, R. E.

GRADUATE COURSES

EDP. 610.—Principles of Guidance. 3 credits. Prerequisite or corequisite: EDF. 641.
9:20 Daily I 202 SOPER, D. W.

An introduction to the field of student personnel work.

EDP. 611.—Occupational Information. 3 credits.
11:40 Daily YON 232 STRIPLING, R. O.

Methods of studying occupations; sources of information concerning employment conditions, job requirements, training facilities, occupational trends; evaluation of occupational literature; use of occupational information in counseling.

EDP. 612.—Techniques of Guidance. 3 credits. Prerequisite or corequisite: EDP. 610, EDF. 641, EDF. 450 or equivalent, or approval of instructor.
9:20 Daily I 103 LANE, D.

A survey of the various techniques used by teachers and guidance specialists, with special reference to tests, records, and counseling.

EDP. 613.—Personnel Testing. 3 credits. Prerequisite: EDF. 360 or EDF. 450, or permission of instructor.
10:30 Daily YON 226 ENGBRETSON, W. E.

A study of typical aptitude tests and inventories used in personnel work, with assigned readings in test literature. Procedures for standardizing and validating tests will be considered, with emphasis on the evaluation of the various instruments for use in personnel work.

EDP. 614.—Case studies in Counseling. 3 credits. Prerequisite: EDF. 641. EDP. 610, and EDF. 450 or equivalent.
12:50 Daily YON 228 SOPER, D. W.

Competency is developed in the appraisal of diagnostic data obtained from case histories and in the application of counseling theory and techniques. Actual case records will be prepared, studied, and discussed in class.

EDP. 618.—The Organization and Administration of Guidance Programs. 3 credits. Prerequisite: EDP. 610, EDF. 641, EDF. 450.
8:10 Daily I 109 LANDSMAN, T.

Methods of organizing and administering personnel programs in educational institutions.

EDUCATION—SECONDARY

EDS. 305.—The Secondary School Today. 3 credits.
Section 1. 10:30 Daily I 101 CAY, D. F.
Section 2. 11:40 Daily I 101 CAY, D. F.

Purposes and organization of the secondary school, curriculum, teacher's role, adolescent behavior and application of learning theory, guidance, classroom management, student activities, evaluation and reporting student progress, educational issues, and similar topics will be organized to help the student acquire certain basic competencies for teaching.

GRADUATE COURSES

EDS. 600.— Foundations of Secondary School Curriculum. 3 credits.
Section 1. 9:20 Daily YON 232
Section 2. 11:40 Daily YON 311

An analysis of the assumptions underlying the secondary school, the research on which present-day programs are based and the emerging patterns in secondary school curricula.

EDS. 601.—The Junior High School Curriculum. 3 credits.
9:20 Daily I 101 BROWNE, E. B.

Teachers, principals, and supervisors are given an opportunity to analyze and to evaluate the curriculum offerings in the modern junior high school. Emphasis will be placed on developing a school program to meet the needs of early adolescents.

EDS. 602.—The Secondary School Curriculum. 3 credits.
Section 1. 8:10 Daily I 101 BROWNE, E. B.
Section 2. 10:30 Daily YON 228

An analysis of the scope, functions, and types of secondary school curricula. Consideration will be given to criteria for judging the secondary school curriculum and ways of improving existing programs.

EDS. 605.—Evaluation in the Secondary School Program. 3 credits.
10:30 Daily I 203 BOYE, C.

A study of procedures and of techniques of evaluation in secondary schools.

EDS. 611.—The Core Program in the Secondary School. 3 credits.
8:10 Daily YON 232 WHETSTONE, R. W.

A study of the organization, the methods, and the materials used in core classes.

EDS. 635.—Supervision of Pre-Service Teachers, I. 3 credits.
9:20 Daily I 102 McGUIRE, V.

A study of the function of the directing teacher in the internship program and the problems and procedures of supervising the work of interns.

EDS. 640.—Social Studies in the Secondary School. 3 credits.
8:10 Daily I 202

Consideration of the problems of teachers, supervisors, and principals in teaching social studies in grades seven through fourteen. Trends, basic principles, recent improvements in methods and materials will be emphasized. Each student will be given opportunity to develop understandings and skills in a special problem in the social studies.

EDS. 650.—Mathematics in the Secondary School. 3 credits.
9:20 M T Th F YON 316 PHILLIPS, W.
2:00-4:20 W

Selection and use of resource materials in junior and senior high school mathematics; current problems in the teaching of mathematics; laboratory experiences in surveying, preparation of displays, construction of equipment, and examination of films and other types of materials.

EDS. 660.—Science in the Secondary School. (Formerly first half of EN. 533). 3 credits.
8:10 Daily YON 142 MAC CURDY, R. D.

Current problems in teaching science in secondary schools and junior colleges. New materials and techniques of teaching and recent developments in the sciences and their implications.

EDS. 670.—Language Arts in the Secondary School. 3 credits.
8:10 Daily I 105 McGUIRE ,V.

Gives opportunity to principals, supervisors, graduate students, and in-service teachers to work on their own problems at the various levels in grades seven through fourteen. Present trends, basic principles, methods, and materials will be considered.

EDS. 690.—Student Activities in the Secondary School. 3 credits.
11:40 Daily YON 236 WHETSTONE, R. W.

An exploration of the purposes, phases, and operations of student activities. Designed to assist student activity directors, activity sponsors, and principals in improving the activities program in their schools.

EDUCATION—VOCATIONAL AGRICULTURE

EDV. 303.—Methods of Teaching Agriculture. 3 credits.
9:20 Daily YON 150 GARRIS, E. W.

General methods of teaching vocational agriculture will be considered.

EDV. 673.—The Supervision of Vocational Education. 3 credits.
10:30 Daily YON 150 GARRIS, E. W.

Basic principles of national, state, and local supervisory problems will be covered.

ELECTRICAL ENGINEERING

EL. 211.—Introduction to Electrical Engineering. 3 credits. Corequisites: PS. 206, MS. 354.
11:30 Daily ENG 334

A course to provide sophomore students who are planning to enroll in the Department of Electrical Engineering with basic knowledge of fundamentals of electric, magnetic and dielectric circuits, and direct current methods of measurements.

EL. 342.—Elements of Electrical Engineering. 3 credits. The second half of the course EL. 341-342. Prerequisite: EL. 341.

9:20 Daily ENG 334

For engineering students not majoring in electrical subjects. Representation of alternating current by vectors and complex quantities; measurement of power in single phase and polyphase circuits; generation, transmission, and utilization of electrical energy; characteristics of a.c. machinery; testing of a.c. equipment.

EL. 346.—Elementary Electronics. 4 credits. Prerequisite: EL. 361.

Students taking EL. 346 will register for the lecture (Section 1) and one laboratory (Section 11 or 12).

Section 1 9:20 Daily ENG 328
Section 11 12:50-4:10 M W ENG 427
Section 12 12:50-4:10 T Th ENG 427

Basic principles of electron-tubes and electron-tube circuits, vacuum tubes as circuit elements, amplifiers. Classroom and laboratory examples taken from the fields of telephone and radio communications, and electron instrumentation.

EL. 350.—Electrical Laboratory. 1 credit. The second half of the course EL. 349-350. Corequisite: EL. 342.

12:50-4:10 T Th ENG 230

A laboratory course for engineering students not majoring in electrical engineering. Experimental studies and test of alternating current circuits and apparatus.

EL. 362.—Electric Circuits. 4 credits. The second half of the course EL. 361-362. Prerequisite: EL. 361.

Students taking EL. 362 will register for the lecture (Section 1) and one laboratory (Section 11 or 12).

Section 1 8:10 Daily ENG. 328
Section 11 12:50-4:10 M W ENG 424
Section 12 12:50-4:10 T Th ENG 424

Unbalanced polyphase circuits; filters; elements of transmission lines; symmetrical components; nonsinusoidal waves; transient conditions; laboratory experiments in measurements; study of instruments; and verification of theorem.

EL. 493.—Electrical Design and Experimental Procedure. Variable credit.*

To arrange

Special projects are studied and reports prepared thereon.

GRADUATE COURSES

EL. 631.—Advanced Electrical Measurements. 3 credits.

To arrange

Theory and practice of electrical measurements at extremes of voltage, current, power and frequency.

EL. 637.—Transients in Linear Systems. 3 credits.

To arrange

Transient analysis of electrical and mechanical systems stressing Laplace transform methods.

EL. 659.—Statistical Communication Theory. 3 credits.

To arrange

Statistical methods in communication theory; statistical characteristics of messages and noise; correlation functions and spectra; optimum communication systems; rate of transmission of information.

*Credit assigned must be shown on course assignment card.

EL. 691.—Special Topics in Electrical Engineering. Variable credit.*
To arrange

Laboratory, lectures, or conference covering specially selected topics in Electrical Engineering.

EL. 699.—Research and Master's Thesis. 0 to 6 credits.*

Directed research and writing. For students working for the master's degree. Credits cannot be used to reduce the total required for the degree.

EL. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

Directed research and writing. For students working for the doctor's degree. Credits cannot be used to reduce the total required for the degree.
*Credit assigned must be shown on course assignment card.

ENGINEERING GRAPHICS

EGR. 181.—Engineering Drawing. 3 credits. Corequisite: MS. 105.
Section 1. 7:00 to 9:10 Daily and 1 two-hour period to arrange with instructor ENG 514
Section 2. 9:20 to 11:30 Daily and 1 two-hour period to arrange with instructor ENG 514

How to make and how to read engineering drawings.

EGR. 182.—Descriptive Geometry. 3 credits. Prerequisite: EGR. 181.
Section 1. 7:00 to 9:10 Daily and 1 two-hour period to arrange with instructor ENG 500.
Section 2. 9:20 to 11:30 Daily and 1 two-hour period to arrange with instructor ENG 500.

Graphical representation of basic geometrical elements and the solution of related space problems.

EGR. 282.—Mechanisms and Kinematics. 3 credits. Prerequisite: EGR. 182. Corequisite: PS. 205.
Section 1. 8:10 M T W Th ENG 512
Laboratory 12:50 to 4:20 T Th ENG 518
Section 2. 9:20 M T W Th ENG 512
Laboratory 12:50 to 4:20 M W ENG 518

Revolving and oscillating bodies, link work, belts, pulleys, gears, and cams; trains of mechanisms and the velocities of moving parts.

ENGINEERING MECHANICS

EM. 313.—Fluid Mechanics. 4 credits. Prerequisites: EM. 365, MS. 354.
9:20 Daily ENG 440
Laboratory 2:00 to 5:20 T Th RLA 100

Mechanics of compressible and incompressible fluids. Special emphasis on viscosity effects. Bernoulli's theorem, surface and form resistance, impulse-momentum principle, lift and drag, laws of similarity and dimensional analysis. Study includes statics and dynamics, and the application of basic principles to the flow of fluids through measuring devices and pipes, and around immersed bodies.

EM. 365.—Engineering Mechanics-Statics. 3 credits. Prerequisites: PS. 205, ML. 182. Corequisite: MS. 354.
Section 1. 9:20 Daily ENG 432
Section 2. 10:30 Daily ENG 430
Section 3. 11:40 Daily ENG 430

Principles of statics; resultants and equilibrium of co-planar force systems; resultants and equilibrium of space force systems; trusses containing two force members; structures containing three force members; friction; centroids; moments of inertia; Mohr's circle.

EM. 366.—Engineering Mechanics-Dynamics. 3 credits. Prerequisites: EM. 365, MS. 354.

Section 1. 10:30 Daily ENG 440
Section 2. 11:40 Daily ENG 440

Dynamics of particles and rigid bodies for rectilinear translation, curvilinear translation, rotation and plane motion; mass moment of inertia; work and energy; impulse and momentum.

EM. 367.—Strength of Materials. 3 credits. Prerequisites: EM. 365, MS. 354.

Section 1. 8:10 Daily ENG 430
Section 2. 9:20 Daily ENG 430

Tension, compression and shear, stresses and strains; combined stresses; Mohr's circle; riveted joints for pressure vessels and structural work; torsion; bending moments; stresses and deflection of beams; eccentric loading; columns.

ENGLISH

EH. 133.—Effective Writing. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.

Section 2 2:00 Daily, 3:10 W D 120

Designed to aid the student to present his ideas in writing which is not only accurate and clear but pleasing and attractive to the reader. Students are urged to do creative work.

EH. 134.—Contemporary Reading. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.

10:30 Daily AND 20 CUTLER, R.

Designed to aid the student in planning for himself a well-rounded program in reading, which will serve to keep him abreast of the best in contemporary thought. Some time will be spent in introducing each student to the bibliography and writing in the area of his special professional interest.

EH. 201.—Introduction to World Literature. 3 credits. May be taken for credit without EH. 202. Prerequisite: C-3.

8:10 Daily AND 204 VOWLES, R. B.

An introductory course on the backgrounds of English language and literature, with readings from selected masterpieces of the ancient, medieval, and rennaissance worlds, from Homer to Cervantes.

EH. 202.—Introduction to English Literature. 3 credits. The second half of the course EH. 201-202. May be taken for credit without EH. 201. Prerequisite: C-3.

10:30 Daily AND 204

Readings and lectures in the great masterpieces of English literature. Selections chiefly from the work of Chaucer, Shakespeare, Milton, Swift, Pope, Wordsworth, Keats, and Browning.

EH. 209.—The Short Story. 2 credits. Prerequisite: C-3.

7:00 M T W Th AND 204 BAUGHAN, D. E.

The understanding and appreciation of the short story as a literary type. Lectures, readings.

EH. 215.—Introduction to American Literature. 3 credits. Prerequisite: C-3.

11:40 Daily AND 204 PENROD, J. A.

A selection of major American writers from Benjamin Franklin to Robert Frost. Emphasis is placed on understanding and critical appreciation rather than on literary history.

EH. 255.—Business Communications. 3 credits. Prerequisite: C-3.

(Register for one section only.)

Section 1. 7:00 Daily MAT 3 CHILDERS, W. C.
Section 2. 9:20 Daily MAT 3 CHILDERS, W. C.
Section 3. 10:30 Daily MAT 3 PENROD, J. A.

Instruction and practice in giving short oral reports, dictating and writing the most generally used business letters, and planning and executing short written reports, in accordance with the standards of business usage. The student is introduced to business and professional publications, corporation and municipal reports, and other media of communication.

EH. 306.—Modern English Grammar. 3 credits. Prerequisite: C-3 and C-5.
11:40 Daily AND 210 COX, E. H.

A systematic review of current English grammar, including attention to functional aspects of sentence structure, punctuation, and other problems of the mechanics of composition.

EH. 363.—Contemporary Literature: Drama. 3 credits. Prerequisite: C-3 and C-5.
9:20 Daily AND 210 VOWLES, R. B.

Recent and contemporary drama, with emphasis upon such major English and American playwrights as Shaw and Eugene O'Neil. The work of Ibsen and other Continental writers will be treated briefly.

EH. 401.—Shakespeare. 3 credits. Prerequisite: C-3, C-5, and one course in English or Speech.
10:30 Daily AND 210 HERBERT, T. W.

Devoted chiefly to the romantic comedies and the history plays, including **A Midsummer Night's Dream, The Merchant of Venice, Much Ado, As You Like It, Twelfth Night, Richard the Second,** and **Henry the Fourth.** As an aid to the reading of Shakespeare, some of the most interesting features of the Elizabethan stage and drama are treated briefly.

EH. 408.—Ballads and Folksongs. 3 credits. Prerequisite: C-3 and C-5.
12:50 Daily AND 210 KIRKLAND, E. C.

English and Scottish popular ballads: their origin, development, and spread to America. American folksongs: their nature, development, and place as social and folk documents.

EH. 480.—English in the Secondary School. 3 credits. Prerequisite: C-3, C-5, and one course in English.
8:10 Daily AND 212 STRYKER, D.

Designed to help teachers of English by (1) a review of the content, both the language and the literature, of secondary school English, with attention to some of the methods widely used in high school English courses, and (2) a study of both the ultimate and the immediate objectives of the secondary English program.

EH.. 491.—Children's Literature. 3 credits. Prerequisite: C-3 and C-5.
(Register for one section only.)
Section 1. 9:20 Daily AND 212 WISE, J. H.
Section 2. 12:50 Daily AND 212 GEHAN, F. E.

A course designed to arouse and satisfy a genuine interest in children's books apart from school text books, to aid the student to obtain a better working knowledge of this literature, and to make him more aware of degrees of excellence in content and form.

EH. 492.—Literature for the Adolescent. 3 credits. Prerequisite: C-3, C-5, and one course in English.
10:30 Daily AND 212 GEHAN, F. E.

A survey of the different types of reading the adolescent (13 to 18) pursues, with special emphasis upon the criteria for choosing good books, and upon developing a familiarity with the many books for young people of this age.

EH. 497.—Major Writers of the Romantic Period. 3 credits. Prerequisite: C-3, C-5, and one course in English.
8:10 Daily AND 210 MORRIS, A. C.

Selections from the best works of such writers as Wordsworth, Coleridge, Scott, Lamb, Byron, Shelley, and Keats.

EH. 502.—American Literature. 3 credits. The second half of the course EH. 501-502. May be taken for credit without EH. 501. Prerequisite: C-3, C-5, and one course in English.
11:40 Daily AND 212 FAIN, J. T.

Covers the period from 1865 to the present.

EH. 506.—History of the English Language. 3 credits. Prerequisite: C-3, C-5, and one course in English or in a foreign language.
9:20 Daily AND 311

The nature, origin, and development of the English language, with special stress upon structural and phonetic changes and upon the principles which govern modern usage.

GRADUATE COURSES

EH. 600.—Bibliography and Methods of Research. No credit.
2:00-4:10 T Th LIB 404 BOWERS, R. H.

EH. 614.—The Renaissance in England. 3 credits.
8:10 Daily LIB 404 BOWERS, R. H.

Poetry and prose of the 17th century through Milton.

EH. 630.—Individual Work. 3 credits. Prerequisite: 12 hours of English and approval of department head.
To arrange MORRIS, A. C.

Designed for graduate students needing work in subjects not available in currently offered courses. With change of content EH. 630 may be repeated for credit.

EH. 633.—English Literature of the 18th Century. 3 credits.
9:20 Daily LIB 404 HODGES, J. R.

A study of English prose and poetry from Dryden through Pope.

EH. 643.—The English Romantic Period. 3 credits.
10:30 Daily LIB 404 ORAS, A.

Chief emphasis on the work of Burns, Blake, Coleridge, and Wordsworth.

EH. 699.—Research and Master's Thesis. 0 to 6 credits.*

EH. 771.—Seminar in Victorian Literature. 3 credits.
To arrange FAIN, J. T.

EH. 783.—Seminar in American Prose. 3 credits.
To arrange WARFEL, H. R.

Subjects: American biography, autobiography, essay, and history; American criticism.

EH. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

*Credit assigned must be shown on course assignment card.

ENTOMOLOGY

EY. 203.—Economic Entomology. 3 credits.
8:10 M T W Th McC 343 MURPHEY, MILLEDGE, JR.
Laboratory: 12:50 to 3:00 M McC 346

An introduction to economic entomology, which is based upon a study of the life histories, and control of major insect enemies of American agricultural crops. Particular stress is placed upon southern and Florida economic insects. This course is designed for all students in the College of Agriculture either as a pre- or corequisite for other entomology courses.
Textbook, "Destructive and Useful Insects" by Metcalf, Flint and Metcalf.

EY. 432.—Florida Fruit & Vegetable Insects. 3 credits. Prerequisite or corequisite: EY. 203, or EY. 307.
10:30 M T W Th McC 343 MURPHEY, MILLEDGE, JR.
Laboratory: 12:50 to 3:00 W McC 346

The identification, life histories, and control of the major insect pests of Florida's fruit and vegetable crops. For all students in the College of Agriculture especially those interested in economic plant life.
Textbook, "Subtropical Entomology" by Ebeling.

GRADUATE COURSES

EY. 603.—Problems in Entomology. 2 to 4 credits.*
Hours to be arranged. STAFF

A problem for study which may be selected in any field of entomological specialization; including Histology, Morphology, Physiology, Taxonomy, Embryology, Biological Control, Ecology, Toxicology, Plant Quarantine, Commercial Entomology, Life History and Habits, Biology, and Medical and Veterinary Entomology.

EY. 699.—Research and Master's Thesis. 0-6 credits.*
STAFF

Field or laboratory research of entomology problems. Results to be used in preparation of thesis.
*Credit assigned must be shown on course assignment card.

FAMILY LIFE

FAM. 301.—Family Relationships. 3 credits. Prerequisites: SY. 244 or PSY. 201 with permission of the instructor.
9:20 Daily AE 2 RONALDSON, A.

Personal and family relationships; guidance of the student in establishing successful family life patterns.

FORESTRY

FY. 221.—Summer Camp. 5 credits.
Field STAFF

Summer camp covers the entire field of forestry. Students receive field instruction in surveying, cruising, silviculture, and forest management.

FY. 228.—Forest Mensuration. 3 credits.
Field STAFF

NOTE: This course will be given in conjunction with FY. 221.

FY. 431.—Forest Problems Seminar. Variable Credit.*
To arrange STAFF

Supervised study and investigations in some particular phase of forestry or wildlife management.

GRADUATE COURSES

FY. 602.—Research Problems in Silviculture. 3 to 6 credits.*
To arrange

Individual research on a specific problem in silvics, forest tree seed, forest tree propagation, forest soils, forest ecology, and silvicultural practices.

FY. 603.—Research Problems in Wood Utilization. 3 to 6 credits.*
To arrange

Individual research in wood technology, wood preservation, naval stores, small sawmill operation.

FY. 604.—Research Problems in Forest Economics and Management. 3 to 6 credits.*
To arrange

Individual research in forest economics, forest finance, or forest management.
*Credit assigned must be shown on course assignment card.

FY. 605.—Research Methods in Wildlife Management. 3 credits.
To arrange BECKWITH, S. L.

A detailed study of field and laboratory procedures used in wildlife research.

FY. 606.—Research Problems in Wildlife Management. 3 to 6 credits.*
To arrange. BECKWITH, S. L.

Individual problems in the field of wildlife management.

FY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange.

*Credit assigned must be shown on course assignment card.

FRENCH

FH. 133.—First-Year French. 3 credits.
7:00 M T W Th AND 4 MARCHAND, H.
Laboratory: 10:30 Daily AND 11

FH. 134.—First-Year French. 3 credits. Prerequisite: FH. 133 or the equivalent.
10:30 M T W Th AND 4 KURTH, A. L.
Laboratory: 11:30 Daily AND 11

FH. 201.—Second-Year French. 3 credits. Prerequisite: FH. 134 or the equivalent.
7:00 M T W Th AND 5 MARCHAND, H.
Laboratory: 10:30 Daily AND 11

FH. 202.—Second-Year French. 3 credits. Prerequisite: FH. 201 or the equivalent.
10:30 M T W Th AND 5 KURTH, A. L.
Laboratory: 11:40 Daily AND 11

FH. 430.—Individual Work. 3 credits. Prerequisite: 18 hours of college French or the equivalent and permission of the department head.
to arrange AND 3 STAFF

GRADUATE COURSES

FH. 630.—Individual Work. 3 credits.
To arrange AND 3 STAFF

FH. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange AND 3 STAFF

*Credit assigned must be shown on course assignment card.

GENERAL SCIENCE

GL. 301.—Elementary School Science. 3 credits.
Section 1 9:20 YON 142 SHECKLES, M.
Section 2 10:30 YON 142 SHECKLES, M.

The role of science in the development of elementary school children. Experience with the content, materials, and approaches of elementary school science.

GL. 302.—Elementary School Science. 3 credits.
8:10 Daily YON 150 YOUNG, M.

A continuation of GL. 301, emphasizing field and laboratory work in the various areas of science.

GEOGRAPHY

GPY. 200.—Introduction to Geography. 3 credits.
7:00 Daily FLO. 204 DAY, R. L.

A study of the relationships between population, human activities and the physical world.

GPY. 305.—Geography of Florida. 3 credits.
8:10 Daily FLO. 204 DIETTRICH, S. DeR.

The geographic conditions and human adjustments in the major regions of Florida. The distribution of population, routes of communication, industries, resources, and strategic location in their geographical and historical aspects; explanation and interpretation of major phenomena such as weather and climate, geologic structure and land forms, surface and underground drainage, shoreline characteristics, natural vegetation, soil types, and animal life. Optional field trips.

GPY. 430.—Individual Work. 3 credits. For undergraduates only.
To arrange.

Qualified students and the instructor concerned may choose a particular topic or problem for study. GPY. 430 may be repeated for full credit with change of content.

GPY. 481.—Geography of the United States and Canada. 3 credits. Prerequisite: GPY. 200.
9:20 Daily FLO. 204 DAY, R. L.

A survey of the continent north from the Rio Grande with special reference to the natural resources of the United States. The analysis of the major regions of the United States and Canada.

GPY. 486.—Geography of Caribbean America. 3 credits. Prerequisite: GPY. 200.
10:30 Daily FLO. 204 DYER, D. R.

An economic geography course covering the West Indies, Mexico, Central America, Colombia, and Venezuela. The commercial importance of each republic and island as a market for American goods and as a source of raw materials and foodstuffs; Florida's commercial position in such trade.

GRADUATE COURSES

GPY. 630.—Individual Work. 3 credits.
To arrange

A reading or research course in such areas of Geography as are needed by graduate students. May be elected for full credit in subsequent sessions with change of content.

GPY. 683.—Seminar in Geographic Research. 3 credits. Prerequisite: Graduate status with a major or minor in Geography.
To arrange Dyer, D. R.

Discussion, application and critical evaluation of methods of geographic research.

GPY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

GPY. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange

*Credit assigned must be shown on course assignment card.

GEOLOGY

GY. 203.—Elements of Physical Geology. 3 credits.
8:10 M T W Th FLO 209 EDWARDS, R. A.
Laboratory: 2:00 to 4:10 M W FLO 209

A study of minerals and rocks and their formation, geological processes, land forms and their interpretation, and the applications of geological knowledge to human affairs.

GY. 400.—Florida Geology for Teachers. 3 credits.
10:30 M T W Th FLO 209 EDWARDS, R. A.
Laboratory: 2:00 to 4:10 T Th FLO 209

Principles of physical and historical geology as applied to the geology and mineral resources of Florida.

GRADUATE COURSE

GY. 630.—Individual Work. 3 credits. Prerequisite: Graduate status and consent of instructor.
To arrange

For work beyond that offered in the courses in geomorphology, stratigraphy, paleontology, and sedimentology. With change of content, GY. 630 may be elected for additional credit.

GERMAN

GN. 133.—First-Year German. 3 credits.
7:00 M T W Th AND 6 MAUDERLI, M. O.
Laboratory: 11:40 Daily AND 11

GN. 134.—First-Year German. 3 credits. Prerequisite: GN. 133 or the equivalent.
8:10 M T W Th AND 6 CRAPS, J. E.
Laboratory: 11:40 Daily AND 11

GN. 201.—Second-Year German. 3 credits. Prerequisite: GN. 134 or the equivalent.
7:00 M T W Th AND 18 MAUDERLI, M. O.
Laboratory: 11:40 Daily AND 11

GN. 202.—Second-Year German. 3 credits. Prerequisite: GN. 201 or the equivalent.
10:30 M T W Th AND 6 CRAPS, J. E.
Laboratory: 11:40 Daily AND 11

GN. 430.—Individual Work. 3 credits. Prerequisite: 18 hours of college German or the equivalent and the permission of the Department Head.
To arrange AND 3 STAFF

GREEK

GK. 530.—Individual Work. 3 credits. Prerequisite: 12 hours of college Greek or the equivalent and permission of the head of the department.
To arrange D 116 ARATOWSKY, B.

HISTORY

HY. 202.—History of World Civilizations, 1550 to the present. 3 credits.
9:20 Daily PEA 114 DOWD, D. L.

The historical evolution of nationalism and the modern state; the global struggle for power; the spread of European science, technology, industrialism and imperialism throughout the world; the development of contemporary political, social and economic institutions and ideas. The central theme is the expansion of the influence of Western Europe, with some attention to the rise of the United States as a world power.

HY. 245.—United States History to 1865. 3 credits.
8:10 Daily PEA 112 DOTY, F. A.

A survey of the political, economic, social and intellectual development of the people of the United States from the founding of Britain's colonies in North America through the American Civil War.

HY. 246.—United States History, 1865 to the present. 3 credits.
11:40 Daily PEA 112 THOMPSON, A. W.

Reconstruction, the Age of Big Business, the United States as a world power, World War I, the great depression and New Deal, World War II and its aftermath will be studied in an interpretative survey.

HY. 372.—Modern Latin-American History. 3 credits.
10:30 Daily PEA 114 McALISTER, L. N.

A survey of Latin America from the Wars of Independence to the present, with particular attention to the fundamental political, economic, and cultural factors and to the increasing importance of Latin America in world affairs.

HY. 400.—Workshop in Asian Studies. 6 credits.
7:45-9:20 Daily and other hours to arrange. PEA 114 HARRISON, J. A.; LENSON, GEORGE; AND LOUNSBURY, J. H.

A comprehensive introduction to Asia for the in-service-teacher.

HY. 552.—The New South. 3 credits.
10:30 Daily PEA 112 BENTLEY, G. R.

The economic, social, cultural, and political developments in the South from the Civil War to the present.

HY. 599.—Special Study in History. 3 credits.
To arrange

GRADUATE COURSES

HY. 651.—The Emergence of Modern United States. 3 credits.
11:40 Daily LIB 418 OSBORN, G. C.

The United States from 1877 to 1920.

HY. 630.—Individual Work. 3 credits.
To arrange

A reading or research course in such areas of History as are needed by the graduate students. May be elected for full credit in subsequent sessions with change of content.

HY. 699.—Research and Master's Thesis. 0-6 credits.*
To arrange

HY. 799.—Research and Doctoral Dissertation. 1-6 credits.*
To arrange

*Credit assigned must be shown on course assignment card.

HORTICULTURE

HE. 201.—Principles of Horticulture. 3 credits. Desirable prerequisite: BTY. 101-102.
8:10 M T W Th McC 6 WOLFE, H. S.
Laboratory 8:10-10:20 F McC 105

Home and commercial production of fruits, vegetables and flowers. Both for students not expecting to major in horticulture and as an introductory course for horticulture majors which should be taken in the sophomore year. Textbook: Schilleter and Richey, Textbook of General Horticulture.

HE. 341.—Citrus Growing. 3 credits. Prerequisites: BTY. 101-102 or C-6.
10:30 M T W Th McC 9 ZIEGLER, L. W.
Laboratory 12:50-3:00 M McC 105

Citrus production and methods of culture designed to fill the need of the general student in agriculture. It is not to be taken for credit by citrus majors, but is required of students majoring in Agricultural Education and Agricultural Engineering.

HE. 403.—Physiology of Fruit Production. 3 credits. Prerequisites: BTY. 211, HE. 201, SLS. 302.
10:30 Daily McC 6 WOLFE, H. S.

Physiological principles underlying the production of fruit crops.

HE. 405.—Physiology of Herbaceous Crops. 3 credits. Prerequisites: BTY. 211, HE. 201, SLS. 302.
7:00 Daily MCC 9 STOUT, G. J.

A study of the physiological principles underlying the production of vegetable and flower crops.

HE. 499.—Special Problems in Horticulture. 1 to 3 credits.
To arrange

Open to Horticulture seniors on consent of instructor. Individual research work in various phases of horticulture.

GRADUATE COURSES

HE. 670.—Non-thesis Research in Horticulture. 1 to 6 credits.*
To arrange

HE. 699.—Research and Master's Thesis. 0-6 credits.*
To arrange

HE. 799.—Research and Doctoral Dissertation. 1-6 credits.*
To arrange

*Credit assigned must be shown on course assignment card.

INDUSTRIAL ARTS EDUCATION

IN. 300.—Machine Woodwork. 3 credits.
8:10-10:20 Daily YON 20 MASSEY, H.

Power machinery and machine maintenance, and use of the jointer, tilting arbor saw, band saw, lathe, mortiser, drill press, router, shaper, and other machines.

IN. 330.—Elementary Hardcrafts. 3 credits.
8:10-10:20 Daily YON 304B WILLIAMS, D.

Creation of simple projects in such media as leather, textiles, clay, reed, plastics, lineoleum block, metal, wood, and native material.

IN. 331.—Handcrafts. 3 credits.
2:00-4:20 Daily YON 304B WILLIAMS, D.

Major areas include leather carving and tooling, metal etching, wood carving, pottery, plastics, and textiles.

IN. 440.—Industrial Arts Laboratory. 3 credits.
To arrange YON 302 MASSEY, H.

For advanced undergraduate students. Extension of work in one of the certification areas in industrial arts.

GRADUATE COURSES

IN. 606.—History and Philosophy of Industrial and Vocational Education. 3 credits.
8:10 Daily YON 302 BERGENGREN, R. F.

Historical background and educational philosophies with emphasis on modern concepts.

IN. 630.—Individual Work. 3 credits.
Section 1. To arrange YON 302 BERGENGREN, R. F.

Problems approved by the instructor.

IN. 633.—Industrial Arts and Vocational Laboratory Seminar. 3 credits.
9:20 Daily YON 302 STRICKLAND, T. W.

Advanced laboratory techniques and opportunity for in-service graduates to exchange experiences.

IN. 653.—Industrial-Technical Resources. 3 credits.
10:30 Daily YON 302 STRICKLAND, T. W.

A study of resources through visitation, observation, evaluation, and report.

INDUSTRIAL ENGINEERING

IG. 371.—Job Analysis and Evaluation. 2 credits. Prerequisite: Upper Division classification.
9:20 M T W Th ENG 343

Analysis of the mental and physical requirements, responsibilities and working conditions of jobs and the several systems of determining the relative worth of jobs. Wage determination. Job evaluation plan installation and maintenance. Merit rating.

IG. 460.—Engineering Economy. 3 credits. Prerequisite: Engineering classification.
10:30 Daily ENG 312

The economic aspect of technical projects; the importance of alternative solutions being selected through economy, intangible and financial analysis stressed. "Will it pay?" and "Can it be financed?" Questions are analyzed from the engineering and management viewpoints. Lectures, discussions, and the solution of problems.

IG. 463.—Specifications, Contracts, Ethics and Industrial Safety. 3 credits. Prerequisite: Engineering classification.
8:10 Daily ENG 312

Specifications writing for materials and construction of engineering projects; advertising and letting of contracts, agreements and contractual relations. Engineering ethics. Organization of safety work in industry; accident causes and legal responsibility of employer and employee.

IG. 472.—Human Engineering. 2 credits. Prerequisite: Engineering classification.
10:30 M T W Th ENG 343

Human nature in design and production problems. Consideration of the human element in the design of equipment and processes, as well as human reactions to plant situations.

IG. 699.—Research and Master's Thesis. 0 to 6 credits.
To be arranged

INTER-AMERICAN STUDIES

IA. 699.—Research and Master's Thesis. 0-6 credits.
To arrange

IA. 799.—Research and Doctoral Dissertation. 1-6 credits.
To arrange

JOURNALISM

JM. 430.—Individual Problems in Journalism. 3 credits.
To arrange.

JM. 508.—Public Opinion. 3 credits.
8:10 Daily STA 236

The force of public opinion in modern life; the psychological technique and strategy of directors of public opinion; attitude-measurement; reader-interest surveys; radio-audience and movie audience measurement; market and consumer analysis; public opinion polls.

JM. 509.—Law of the Press and Radio-TV. 3 credits.
10:30 Daily STA 236

How to avoid legal difficulties in journalistic activities, with especial attention to provisions of Florida law relating to journalism and radio-Tv.

GRADUATE COURSES

JM. 611.—History of Communications. 3 credits.
To arrange.

JM. 630.—Individual Work. 3 credits.
To arrange.

JM. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

*Credit assigned must be shown on course assignment card.

LATIN

LN. 105.—The Latin Element in English. 2 credits.
9:20 M T W Th AND 18 ARATOWSKY, B.

LN. 430.—Individual Work. 3 credits. Prerequisite: 18 hours of college Latin or the equivalent, and permission of the department head.
To arrange D 116 ARATOWSKY, B.

GRADUATE COURSE

LN. 630.—Individual work. 3 credits.
To arrange D 116 ARATOWSKY, B.

LAW

LW. 402.—Contracts II. 2 credits.
9:20 M T Th F LAW 203 JONES, E. M.

The effect of various types of non-performance on the rights and duties of the parties to a business agreement; assignability of contracts; rights of third-party beneficiaries.

LW. 410.—Estates and Trusts I. 3 credits.
8:10 Daily Law 201 MACDONALD, W. D.

The substantive law of intestate succession, execution of wills, making of gifts inter vivos and causa mortis and creation non-commercial trusts.

LW. 412.—Torts II. 3 credits.
11:40 Daily LAW 201 MALONEY, F. E.

Negligence; early developments, standard of care, duty to act, functions of judge and jury, res ipsa loquitur, proximate cause, defenses, measure of damages; nuisance; liability of owners and occupiers of land; relationship of tort and contract liability; misrepresentation; malicious prosecution and abuse of process; interference with advantageous relations.

LW. 501.—Commercial Transactions I. 3 credits.
8:10 Daily LAW 203 DELONY, D.

An integrated study of the law applicable to commercial transactions, with emphasis on the distribution of goods, the issuance and negotiation of commercial paper, and the means by which transactions are secured, such as, conditional sales, chattel mortgages, liens, pledges, and contracts of suretyship.

LW. 506.—Estate & Gift Taxation. 2 credits.
7:00 T W Th F LAW 104 STEPHENS, R. B.

Elements of federal tax procedure; fundamentals of federal estate and gift taxation; techniques of federal tax research.

LW. 507.—Pleading and Jurisdiction. 4 credits.
10:30 Daily, 11:40 W Th LAW 203 YONGE, P. K.

History of Florida and Federal procedural law; joinder and splitting of causes of action; counterclaims; venue; in personam and in rem jurisdiction; real parties in interest; joinder of parties; interpleader; intervention; class suits; commencement of action; pleadings and motions.

LW. 508.—Evidence. 4 credits.
9:20 W Th, 10:30 Daily LAW 104 TeSELLE, C. J.

Witnesses, including competency, privilege, examination, impeachment and rehabilitation; character evidence; hearsay and the exceptions to its exclusion; opinion; real evidence; proof of execution of writing; the "best evidence" rule; judicial notice; presumptions; burden of proof.

LW. 510.—Fiduciary Administration I. 2 credits.
11:40 M T Th F Law 104 SCOLES, E. F.

Administration of decedents' estates and non-commercial trusts; steps in the administration of a decedent's estate, whether testate or intestate; powers of the executor, the administrator, and the trustee.

LW. 552.—Abstracts. 2 credits.
7:00 T W Th F LAW 104 DAY, J. W.

Abstract of title; description of land; records of title in Florida; curative acts and limitations acts pertaining to defects of title; the formal requisites of conveyances in Florida; conveyances by married women; conveyances of homestead; conveyances by corporations; the lien of state and federal judgments; federal tax liens.

LW 554 Estate & Trusts II. 2 credits.
11:40 T W Th F LAW 304 MAC DONALD, W. D.

Protection of the family of the transferor; admissibility and effect of extrinsic evidence; ademption, lapse and satisfaction; revocation of wills; termination of trusts.

LW. 574.—Advanced Equity. 2 credits.
9:20 M T Th F LAW 201 MALONEY, F. E.

Specific performance: nature of jurisdiction, the statute of frauds, part performance; rescission and reformation; equitable relief against unjust situations at law, including interpleader, accounting, bills quia timet, bills of peace, and class suits.

LW. 605.—Income Taxation. 2 credits.
10:30 M T Th F LAW 201 STEPHENS, R. B.

The fundamentals of federal income taxation; techniques of federal tax research.

LW. 612.—Legal Ethics. 1 credit.
8:00-10:00 p.m. T to be announced FENN, H. A.

Responsibilities of the legal profession; Canons of Ethics of the American Bar Association; organization of the bar; current problems and activities of the legal profession.

LW. 651.—Fiduciary Administration II. 2 credits.
8:10 M T Th F LAW 104 SCOLES, E. F.

Problems of the fiduciary in the allocation of receipts and disbursements between principal and income in the administration of trusts and estates; the Uniform Principal and Income Act; apportionment of estate taxes.

LW. 667.—Trade Regulations. 2 credits.
11:40 T W Th F LAW 202 SLAGLE, D.

Common law and statutory regulation of trade and industry; the restraint of trade and antitrust laws.

LW. 671.—Admiralty. 2 credits.
8:10 M T Th F LAW 202 SLAGLE, D.

Origin of admiralty jurisdiction; waters and craft; laws affecting maritime affairs; sovereign immunity; maritime liens; seamen's rights; carriage of goods; charter parties; towage; pilotage; salvage; general average; collisions, navigation rules, limitation of liability; marine insurance.

LW. 672.—Damages. 2 credits.
2:00 M T W TH LAW 201 JONES, E. M.

General principles; non-compensatory damages; forseeability; certainty; avoidable consequences; interest; value; problems dealing with specific wrongs, including torts and breach of contract; liquidated damages.

LW. 686.—Labor Law Seminar. 2 credits.
3:10-5:20 p.m. M W LAW 201 DELONY, D.

Problems in labor law and labor relations with emphasis in the fields of collective bargaining and arbitration. The work in this seminar is on an advanced level and is ordinarily available only to students who have completed the basic course in labor law.

LW. 690.—LAW REVIEW. 1 credit
To arrange to arrange DAY, J. W.

Research, writing and editorial work in connection with the publication of the University of Florida Law Review. Limited to students who have completed LW. 408 (or qualified transfer students) and whose average in all law courses attempted is at least 2.0 at each time law review work is undertaken.

LW. 691.—Advanced Legal Research. Credit Variable.
To arrange to arrange

A specific attempt to relate the study of law to practice by modeling instruction upon law office methods. The program is conducted as individual projects. Current problems which are submitted by attorneys throughout the state, are used when available. The student is required to do individual research and to present his findings in the form of a legal memorandum. Emphasis is upon individual work and responsibility.

LIBRARY SCIENCE

LY. 200.—History of Books and Printing. 2 credits.
8:10 M T W Th LI 454 SPERRY, J. A.

The book and the invention of printing in the development of Western culture and society.

LY. 301.—Introduction to Library Materials. 3 credits.
11:40 Daily LI 454 SPERRY, J. A.

Principles and methods of evaluating and selecting books and other library materials and their use for reference and instructional purposes.

LY. 303.—Library Administration. 3 credits.
9:20 Daily LI 454 FRANCIS, E. S.

A study of the objectives, functions and routines of libraries with special attention to library services and management in schools and other academic institutions.

LY. 304.—Organization of Library Materials. 3 credits.
10:30 Daily LI 454 PRINCE, V. C.

Classroom and laboratory practice in the basic procedures of aquisition, preparation and processing of materials for library service in relation to the school and other agencies which the library serves.

LY. 430.—Individual work. 3 credits. Prerequisite: LY 302 or LY 304 and permission of the department head.
To be arranged STAFF

By means of this course students may study for credit the special reference tools, bibliographic aids and important periodicals and books in the area of the Social Sciences, the Humanities, Science and Technology, and/or advanced procedures of acquisition, preparation and processing of materials for library service. With change of content, LY. 430 may be selected for additional credit in subsequent sessions.

MATHEMATICS

MS. 105.—Basic Mathematics. 4 credits. Prerequisite: C-42, except for the superior group in mathematics.

(Register for one section only.)

Section 1 7:00 Daily and 2:00 M W WAL 308
Section 2 8:10 Daily and 2:00 T Th PEA 4
Section 3 9:20 Daily and 2:00 M W PEA 4

In place of the traditional college algebra, trigonometry, and analytic geometry in succession, this course offers a sequence of topics including much of the above and some calculus. Thus the student will obtain early a working knowledge of such mathematics as is basic to the study of the sciences and other subjects. The choice of material is so made as to present mathematics as an integrated whole rather than as a series of segregated topics.

MS. 106.—Basic Mathematics. 4 credits. The second half of the course MS. 105-106.

(Register for one section only.)

Section 1 7:00 Daily and 2:00 M W WAL 202
Section 2 8:10 Daily and 2:00 T Th WAL 308
Section 3 9:20 Daily and 2:00 T Th WAL 209

MS. 208.—Business Mathematics. 3 credits. Prerequisite: C-42, except for the superior group in mathematics. Not open to students who have had MS. 308, and not counted toward a mathematics major in the College of Arts and Sciences.

(Register for one section only.)

Section 1 7:00 Daily WAL 307
Section 2 10:30 Daily WAL 307

Arithmetical, and some algebraic, treatment of the mathematical problems involved in business. Simple interest. Simple, bank, and trade discounts. Promissory notes, drafts, compound interest and related problems, partial payment, annuities, amortization, and other topics of the mathematics of business are treated.

MS. 225.—Arithmetic for Teachers. 3 credits. Prerequisite: C-42. Not open to students who have completed more than two semesters of college mathematics, and not counted toward a mathematics major in the College of Arts and Sciences.

10:30 Daily WAL 213

Treatment of fundamental notions of arithmetic, with certain advanced ideas designed to throw light upon the beginning processes. Intended not only for teachers of arithmetic but also for teachers of other subjects in which familiarity with number processes is desirable.

MS. 310.—Statistical Methods. 3 credits. Prerequisite: C-42 or its equivalent.

10:30 Daily WAL 209

Presents the bases of the various procedures as well as practical computational methods. The statistics of frequency distributions; moments; normal curve; curve fitting; regression and correlation analysis. Introduction to Chi-square, Student's t, and the F distributions.

MS. 325.—Advanced General Mathematics. 3 credits. Prerequisite: C-42.

Section 1 9:20 Daily WAL 102

Continuation of the arithmetic and algebraic topics of elementary general mathematics with new material added. The deeper meaning of laws underlying number operations. Some properties of positive whole numbers. Higher functional analysis. Valuable to prospective teachers of mathematics and others who wish to continue some mathematical work without becoming specialists in pure mathematics.

MS. 327.—Advanced General Mathematics. 3 credits. Prerequisite: MS. 325.
10:30 Daily WAL 102

The general processes pursued in MS. 325 are continued, with special emphasis on analysis. The analytic treatment is applied extensively to algebraic, exponential, logarithmic, geometric, and trignometric functions. The informal notions of the derivative and integral introduced in MS. 325 are applied throughout the course and extended as needed. Mathematics is presented throughout as a single whole, both in its effect on the material side of civilization and as a creative force in its own right. The sequence C-42, MS. 325, and MS. 327 constitutes a cultural approach to formal courses in the calculus.

MS. 353.—Differential Calculus. 4 credits. Prerequisite: MS. 106 or 327.
(Register for one section only.)

Section 1	8:10 Daily and 2:00 M W	WAL 307
Section 2	9:20 Daily and 2:00 T Th	WAL 211
Section 3	10:30 Daily and 2:00 T Th	WAL 202

Differentiation and integration. Typical problems solved by these methods are calculation of rates of change, computation of areas, volumes, moments of inertia, energy, power, and many others. Various advanced topics of special value to engineers and scientists. Open to University College students.

MS. 354.—Integral Calculus. 4 credits. The second half of the course MS. 353-354. Prerequisite: MS. 353 or its equivalent.
(Register for one section only.)

Section 1	8:10 Daily and 2:00 M W	WAL 209
Section 2	9:20 Daily and 2:00 T Th	WAL 307
Section 3	10:30 Daily and 2:00 M W	WAL 211

MS. 405.—Theory of Equations. 3 credits. Prerequisite: MS. 106 or 327.
11:40 Daily WAL 207

Theorems and methods of solution of equations of higher degree. Various methods of approximating solutions of numerical equations. Determinants; systems of linear equations. Symmetric functions. Elimination, resultants, and discriminants.

MS. 411.—Survey of Modern Algebra. 3 credits. Prerequisite: MS. 106 or 327.
9:20 Daily WAL 207

An introduction to the simpler concepts of higher algebra. Number system, number theory, groups, rings, ideals, integral domains, fields, matrices, etc.

MS. 420.—Differential Equations. 3 credits. Prerequisite: MS. 354.
7:00 Daily WAL 213

The classification, solution and application of various equations which contain expressions involving not only variables, but also the derivatives of these variables. Not open for credit to students who have taken MS. 521.

MS. 430.—Individual Work. 3 credits. Prerequisite: MS. 354 and permission of Head of Department.
To be arranged

For undergraduate work needed by the student and not obtainable in the regular course offerings.

MS. 431.—College Geometry. 3 credits. Prerequisite: MS. 326 or its equivalent.
8:10 Daily WAL 211

The use of elementary methods in the advanced study of the triangle and circle. Special emphasis on solving original exercises. Valuable to prospective high school and college geometry teachers.

MS. 455.—Intermediate Calculus. 3 credits. Prerequisite: MS. 354.
7:00 Daily WAL 209

This course is designed to bridge the gap between the first course in the calculus and graduate courses. It covers hyperbolic functions, additional methods of integration, and some topics in solid analytic geometry with emphasis on partial differentiation and multiple integration. It completes and supplements MS. 353-354.

MS. 501.—Introduction to Mathematical Thought. 3 credits.
11:40 Daily WAL 211

The anatomy of mathematics. The axiomatic method. Theory of sets. Transfinite arithmetic. The linear continuum and the real number system. Groups and their significance. Generalizations of classical mathematics. Mathematical philosophies.

MS. 510.—Mathematical Statistics. 3 credits.
10:30 Daily WAL 301

A study of the binomial distribution, DeMoivre-Laplace theorem, distribution functions and moment-generating functions; frequency distribution of two variables; development and some applications of the Chi-square, Student's t and F distributions.

MS. 521.—Higher Mathematics for Engineers and Physicists. 3 credits. Prerequisite: MS. 354.
7:00 Daily WAL 301

The first third of the course MS. 521-522-523. Not open for credit to students who have taken MS. 420. Ordinary differential equations with emphasis on numerical methods and series solutions; the Laplace transform; boundary value problems; orthogonal functions. The methods of vector analysis and special topics of partial differential equations, and the functions of a complex variable with applications.

MS. 522.—Higher Mathematics for Engineers and Physicists. 3 credits. Prerequisite: MS. 521 or MS. 420.
9:20 Daily WAL 202

The middle third of MS. 521-522-523.

MS. 523.—Higher Mathematics for Engineers and Physicists. 3 credits. Prerequisite: MS. 522.
8:10 Daily WAL 301

The last third of MS. 521-522-523.

MS. 551.—Advanced Topics in Calculus. 3 credits.
9:20 Daily WAL 301

Topics of advanced nature selected from the calculus, including partial differentiation, Taylor's theorem, infinite series, continuation of simple multiple integrals, line and surface integrals, and Green's theorem.

GRADUATE COURSES

MS. 602.—Vector Analysis. 3 credits.
10:30 Daily WAL 308

The algebra and calculus of vectors in two and three dimensions. Applications to problems in physics and engineering.

MS. 607.—Tensor Analysis. 3 credits.
9:20 Daily WAL 308

A study of transformations of coordinates, matrices, and tensors. The calculus of tensors. Special attention to the applications of tensors in differential geometry, differential equations, problems from physics, and n-dimensional Euclidean, Riemannian, and other spaces.

MS. 613.—Theory of Groups of Finite Order. 3 credits.
7:00 Daily PEA 4

Introduction to the group concept; a treatment of pure group-theory with numerous examples and a few of the simpler applications.

MS. 624.—Synthetic Projective Geometry. 3 credits.
11:40 Daily WAL 307

Pure geometry, dealing primarily with properties unaltered by the processes of projection and section; principal theorems involved; theory of poles and polars; rules surfaces of second order; the theory of involution.

MS. 630.—Individual Work. 3 credits.
To be arranged

Under this number special work may be taken by graduate students.

MS. 636.—Foundation of Geometry. 3 credits.
8:10 Daily WAL 102

An investigation of the assumptions of geometry; the parallel postulate; steps leading to non-Euclidean geometries; consequent development of modern branches of the subject; elements of non-Euclidean geometry, trigonometry, and calculus.

MS. 640.—Fourier Series. 3 credits.
12:40 Daily WAL 102

The application of trigonometric series to the solution of boundary-value problems of mathematical physics. Solutions are obtained to partial differential equations relating to the flow of heat, conduction of electricity and vibrating strings.

MS. 661.—General Topology. 3 credits.
8:10 Daily WAL 207

Topological spaces; homeomorphisms and functions of sets; arcs and continuous curves; topological notions such as connectedness, compactness, separability, etc.; application to analysis.

MS. 668.—History of Elementary Mathematics. 3 credits.
10:30 Daily WAL 207

A survey of the development of mathematics through the calculus, with special emphasis on the changes of the processes of operations and methods of teaching. No specific textbook is followed, but a number of works are used as reference.

MS. 699.—Research and Master's Thesis. 0 to 6 credits.*
To be arranged

MS. 799.—Research and Doctoral Dissertation. 1-6 credits.*
To be arranged

MECHANICAL ENGINEERING

ML. 381.—Elementary Heat Power. 3 credits. Prerequisites: ML. 354, PS. 206.
8:10 Daily ENG 418

The fundamentals of steam power plants, internal combustion engines, and compressed air machinery.

ML. 384.—Metallography and Heat Treatment. 3 credits. Prerequisite: CG. 361.
8:10 M T Th F ENG 345
Laboratory: 12:50 to 4:10 T Th ENG 550

The crystal structure of ferrous and non-ferrous metals and their alloys; the iron-carbide diagram, heat treatment, and use of steel and cast iron.

ML. 385.—Thermodynamics I. 3 credits. Prerequisites: MS. 354, PS. 206, CY. 218.
10:30 Daily ENG 418

Energy equations and availability of energy; gases, vapors, and mixtures; engineering applications in flow of fluids, vapor power cycles.

ML. 387.—Mechanical Laboratory I. 1 credit. Corequisite: ML. 385.
12:50 to 5:30 M W WAL 103

The preparation of engineering reports, computation aids, the measurement of area, time, speed, pressure, temperature and gas flow.

*Credit assigned must be shown on course assignment card.

ML. 489.—Manufacturing Operations I. 3 credits. Prerequisite: EM. 366. Co-requisite: EM. 367.

(Register for the Lecture Section and One Laboratory Section)

Lecture Section 1: 10:30 M T W Th ENG. 512

Laboratory Sections:

Section 11. 12:50 to 4:10 T Th F 103

Section 12. 12:50 to 4:10 M W F 103

Machinery, materials and processes used in manufacturing.

ML. 491.—Machine Design I. 4 credits. Prerequisites: ML. 283, EM. 366, EM. 367. 9:20 Daily and 12:50 to 4:10 T Th ENG 501

Stress analysis of machine elements, design procedure, design of machine elements.

GRADUATE COURSES

ML. 683.—Mechanical Research I. Variable credit. Prerequisite: ML. 483-484.
To arrange

Research projects in Mechanical Engineering.

ML. 689.—Advanced Mechanical Laboratory I. 3 credits. Prerequisite: ML. 483-484.
To arrange

Experimental projects in Mechanical Engineering.

ML. 699.—Research and Master's Thesis. 0 to 6 credits.*

*Credit assigned must be shown on course assignment card.

MEDICINE

MED.—615.—Introduction to Biochemical Research. 4 credits.
To arrange

MED. 630.—Research in Medical Sciences. 0 to 6 credits.*
To arrange

MED. 699.—Research and Master's Thesis in Medical Sciences. 0 to 6 credits.*
To arrange

MED. 799.—Research and Doctoral Dissertation in Medical Sciences (Biochemistry). 1 to 6 credits.*
To arrange

MUSIC

***MSC. 21.—Piano.** 1 credit.
DANBURG, R. L.

***MSC. 25.—Voice.** 1 credit.
BOATRIGHT, C. A., PARK, J. F.

***MSC. 27.—Stringed Instruments.** 1 credit.
PREODOR, E. C.

***MSC. 35.—Woodwind Instruments.** 1 credit.
BOLLES, R. S.

*Credit assigned must be shown on course assignment card.

*MSC. 43.—**Brass Instruments.** 1 credit.
POOLE, R.

*MSC. 51.—**Percussion Instruments.** 1 credit.
POOLE, R.

All Applied Music Courses, except Organ, as outlined in the University of Florida General Catalogue will be offered during the Summer Session of 1957.

MSC. 160.—**Music Skills.** 3 credits.
(Register for one section only.)
Section 1. 9:20 Daily R 201
Section 2. 11:40 Daily R 201

Fundamentals of music needed by the classroom teacher for teaching music in the elementary school.

MSC. 161.—**Music for the Elementary Child.** 3 credits. Prerequisite: MSC. 160 or equivalent.
10:30 Daily R 201 PAUL, O. F.

MSC. 161 is a state certification requirement for teaching in the elementary schools.
Principles, problems, and procedures relative to the teaching of music by the classroom teacher in the elementary school.
*Students registered for Applied Music will be assigned instructor, time and place of meeting at the registration desk.

MSC. 170.—**University Orchestra.** 1 credit.
7:30 p.m. M, 4:20 Th R 144 PREODOR, E. C.

Study and performance of standard orchestra literature.

MSC. 171.—**Choral Union.** 1 credit.
3:10 Daily R 122 BOATRIGHT, C. A.

Study and performance of large choral works. A mixed chorus.

MSC. 174.—**University Band.** 1 credit.
4:20 M T W F R 144 POOLE, R.

Study and performance of standard band literature.

MSC. 210.—**Music Appreciation.** 2 credits.
2:00 M T Th F R 201 WIRTALA, A. E.

A study, through group listening and discussion, to expand the student's understanding of music literature.

MSC. 260.—**Music Education in the Elementary School.** 3 credits. Prerequisite: MSC. 162.
8:10 Daily R 201 SCHMIDT, D. T.

Fundamental principles and procedures of music education in the elementary school.

MSC. 363.—**Projects and Problems in Music.** 3 credits.
To arrange R 103 SCHMIDT, D. T.

For the advanced student who wishes some help in the problems of teaching music in an individual situation.

MSC. 364.—**Projects and Problems in Music.** 3 credits. The second half of course MSC. 363-364.
To arrange R 105 PAUL, O. F.

MSC. 405.—**Conducting.** 3 credits. Prerequisite: Eight credits in one area of applied music or permission of the instructor.
11:40 Daily R 144 WIRTALA, A. E.

Basic techniques of choral and instrumental conducting.

MSC. 412.—Survey of Music History. 2 credits. The first half of course MSC. 412-413.
12:50 M T Th F R 201 PARK, J. F.

A detailed study of the history of music with emphasis on its relationship to the history of man.

MSC. 461.—School Music Administration. 3 credits.
9:20 Daily R 202 BOLLES, R. S.

Fundamental principles and problems of organization and administration of city, county and state school music systems.

NURSING

NSG. 101.—Introduction to the Nursing Profession. 3 credits.
8:10 Daily MSB 203 SMITH, DOROTHY

Open to University College students. A required course for nursing students. Offered 1, 3. An introductory course in nursing to give students a broad understanding and appreciation of the growth and development of the nursing profession.

NSG. 111.—Introduction to Nursing Functions. 3 credits.
9:20 Daily MSB 203 SMITH, DOROTHY

Open to University College students. A required course for nursing students. Offered 2, 3. An exploration of the role of the nurse in health promotion and care of the sick. Introduction to nurse-patient and nurse-co-worker relationships, and to purposeful conversation technics.

PHARMACEUTICAL CHEMISTRY

GRADUATE COURSES

PCY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

PCY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange

PHARMACOGNOSY

PGY. 222.—Practical Pharmacognosy. 3 credits.
8:10 Daily LEI 432 GRAMLING, L. G.

GRADUATE COURSES

PGY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

PGY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange

PHARMACOLOGY

PLY. 301.—Applied Human Anatomy for Pharmacists. 4 credits.
10:30 M T Th F LEI 432 KISSEL, J. W.
Lab. 2:00-5:20 M T W Th LEI 314

PLY. 405.—Introductory Pharmacology. 3 credits.
12:50 Daily LEI 432 VOSS, E.

GRADUATE COURSES

PLY. 630.—Special Problems. 5 credits.
To arrange FOX, L. E.

PLY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

PLY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange

PHARMACY

PHY. 106.—Pharmaceutical Calculations. 2 credits.
10:30 M T Th F LEI 324 KERN, J. H.

PHY. 224.—Galenical Pharmacy. 3 credits.
9:20 M T Th F LEI 324 KERN, J. H.
Lab. 9:20-12:50 W and 12:50-4:20 F LEI 306

PHY. 456.—Pharmaceutical Specialties. 3 credits.
11:40 M T Th F LEI 324 LAUTER, W. M.
Lab. 9:20-11:40 W and 2:00-4:20 F LEI 314

PHY. 462.—Prescriptions and Dispensing. 4 credits.
8:10 M T Th F LEI 324 BECKER, C. H.
Lab. 9:20-11:40 M T Th F LEI 306

GRADUATE COURSES

PHY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

PHY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange

*Credit assigned must be shown on course assignment card.

PHILOSOPHY

PPY. 201.—Problems of Philosophy. 3 credits.
8:10 Daily AND 104 OLIVER, J. W.

A consideration of some of the major problems of philosophy-ethics, philosophy of science, theory of knowledge, philosophy of art, philosophy of religion and metaphysics. Selections from the writings of important philosophers, ancient and modern, with emphasis upon the modern, will be read.

PPY. 321.—Ethics. 3 credits.
9:20 Daily AND 104 BARTLETT, G. R.

An inquiry into basic concepts and principles of morals. Readings will include selections from the works of important ethicists.

PPY. 430.—Individual Work. 3 credits.
Prerequisite: 12 hours of philosophy, and permission of the departmental adviser.
To be arranged STAFF

Provision will be made for advanced undergraduate students who desire to supplement the regular courses by individual reading or investigation under guidance. Students will be helped to plan a definite program, and will meet a member or members of the departmental staff in frequent conferences. With change of content, PPY. 430 may be elected for full credit in subsequent sessions.

GRADUATE COURSES

PPY. 601.—Seminar in History of Philosophy. 3 credits.
To be arranged
Prerequisite: Approval of the departmental adviser.

The material selected for study may vary in accordance with the needs and interests of the students.

PPY. 630.—Individual Work. 3 credits.
Prerequisite: Approval of the departmental adviser.
To be arranged STAFF

Provision will be made for graduate students who desire to supplement the regular courses by individual reading or investigation under guidance. Students will be helped to plan a definite program, and will meet a member or members of the departmental staff in frequent conferences. With change of content, PPY. 630 may be elected for full credit in subsequent sessions.

PPY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To be arranged

*Credit assigned must be shown on course assignment card.

PHYSICAL EDUCATION, HEALTH AND ATHLETICS

PHA. 251.—Folk, Social and Tap Dance. 2 credits.
11:40 Daily FLG 206 MILLAR, J. and WAGLOW, I.

Basic skills in folk, square, social and tap dancing.

PHA. 282.—Basketball. 2 credits.
9:20 Daily FLG 206 McCACHREN, J.

Skills, rules, coaching methods, offensive and defensive team play in basketball.

PHA. 285.—Individual and Dual Sports for Men. 2 credits.
12:50 Daily FLG 206 REHLING, C. and POTTER, W.

Skills, rules, strategies and teaching methods in tennis, handball, golf, and other individual and dual activities.

PHA. 286.—Aquatics. 2 credits.
8:10 Daily FLG 206 LEE, P.

Skills, knowledges and teaching methods in swimming and diving.

PHA. 287.—Gymnastics for Men. 2 credits.
10:30 Daily FLG 206 STEPHENS, F.

Skills, knowledges and teaching methods in gymnastics, tumbling, combatives, and developmental activities.

PHA. 324.—Social Recreation. 3 credits.
9:20 Daily FLG 210 LEILICH, R.

Methods, materials and techniques of conducting social recreation programs. Planning and participating in social activities for groups of varying sizes and for different situations. The activities include progressive parties, quiet and semi-active group games, stunts and contests, social mixers, outing events including hikes and picnics, and activities for special occasions, such as Thanksgiving, Halloween and Christmas.

PHA. 325.—Conduct of Playgrounds and Indoor Centers. 3 credits.
9:20 Daily FLG 224

For community recreation workers, school personnel and volunteers interested in the operation of playground and indoor center programs. Physical facilities, layout and equipment, personnel, activities, program planning and problems of operation and administration.

PHA. 361.—Elementary School Health Program. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily FLG. 208 HICKS, D.
Section 2. 9:20 Daily FLG 208 SANDEFUR, W.
Section 3. 10:30 Daily FLG 208

Principles of developing the health program with procedures for protecting and improving the health of the elementary school child through: home-school-community resources and cooperation; health screening and follow-up; use of school plant health services; selection and use of health instructional materials, records and reports in providing health experiences at various levels of the elementary school; integration and evaluation of health instruction.

PHA. 369.—School Safety Education. 2 credits.
10:30 M T W Th FLG 224 LEILICH, R.

General safety content as applied in elementary and secondary school programs. Methods and materials for teaching safety, and the organization of safety education programs.

PHA. 373.—Teaching Physical Education in the Elementary School. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily FLG 222 PYE, R.
Section 2. 9:20 Daily FLG 222 MILLAR, J.
Section 3. 10:30 Daily FLG 222 PYE, R.

The program of physical education activities for the elementary school including small group play, large group play, directed play, rhythmic activities and team games, together with methods and procedures for conducting such a program.

PHA. 376.—First Aid and Injuries. 2 credits.
Prerequisite: Limited to Upper Division students.
11:40 M T W Th FLG 208 LEE, P.

Standards and accepted principles of first aid. Dressings and bandages, wounds and their care, artificial respiration, poisons, fractures and dislocations, burns, transportation of the injured, and other common emergencies.

PHA. 421.—Driver Education and Traffic Safety. 3 credits. Prerequisite: Limited to Upper Division students who hold a valid driver's license.
8:10 Daily FLG 224 DAMRON, C.

Prepares teachers to conduct driver education and training courses on the secondary school level. Methods and materials concerned with the psychophysical limitations of drivers, driving practices, automobile construction, manipulation and maintenance, pedestrian protection, road training, and skill tests.

GRADUATE COURSES

PHA. 601.—Interpretations of Physical Education. 3 credits.
9:20 Daily FLG 309 SALT, E.

The broad philosophical bases upon which the modern program of physical education is predicated. Biological, psychological, sociological and educational implications in interpreting and delineating the function of physical education in contemporary democratic society.

PHA. 605.—Research Methods in Physical Education, Health Education and Recreation. 3 credits.
10:30 Daily FLG 309 DAMRON, C.

Elements and techniques of research and their application to problems in the fields of physical education, health education and recreation. The identification of the various research methods, familiarization with outstanding and significant research reports, evaluation of published research.

PHA. 615.—Supervision of Physical Education. 3 credits.
11:40 Daily FLG 309 LEAVITT, N.

For those now employed or planning to become supervisors of state, county or city programs of physical education. Observational techniques, the evaluation and improvement of programs and teaching, standards of judging instruction, types of conferences, principles of curriculum construction, and administrative relationships.

PHA. 618.—The College Physical Education Program. 3 credits.
8:10 Daily FLG 309 SCHNELL, H.

A study of the philosophy, program content, administration and methods of conducting the required, intramural and professional preparation programs of physical education in colleges and universities.

PHYSICS

PS. 201.—General Physics. 3 credits. The first half of the course PS. 201-202. Prerequisite: C-42.

(Register for the Demonstration Section, the Discussion Section, and for PS. 207.)

Demonstration Section 1: 11:40 F BEN 203 STAFF
Discussion Section 11: 7:00 Daily BEN 210 TELLER, M. H.

General Physics for science students.

PS. 202.—General Physics. 3 credits.

(Register for the Demonstration Section, the Discussion Section, and for PS. 208.)

Demonstration Section 1: 11:40 Th BEN 203 STAFF
Discussion Section 11: 8:10 Daily BEN 210 STAFF

PS. 205.—General Physics. 3 credits. The first half of the course PS. 205-206. Prerequisites: MS. 105-106. Corequisite: MS. 353.

(Register for the Demonstration Section, one Discussion Section, and for PS. 207.)

Demonstration Section 1: 11:40 F BEN 203 STAFF
Discussion Section 11: 8:10 Daily BEN 209 STAFF
Discussion Section 12: 9:20 Daily BEN 209 STAFF

Theory of Mechanics, heat, sound, electricity and light. Primarily for engineering students.

PS. 206.—General Physics. 3 credits. Corequisite: MS. 354.

(Register for the Demonstration Section, one Discussion Section, and for PS. 208.)

Demonstration Section 1: 11:40 Th BEN 203 STAFF
Discussion Section 11: 9:20 Daily BEN 207 STAFF
Discussion Section 12: 10:30 Daily BEN 207 STAFF

PS. 207.—Laboratory for PS. 201 and PS. 205. 1 credit.

(Register for one section only.)

Section 111: 12:50-3:50 M W BEN 305 TELLER, M. H.
Section 112: 12:50-3:50 M W BEN 306 TELLER, M. H.
Section 113: 12:50-3:50 T Th BEN 305 TELLER, M, H.
Section 114: 12:50-3:50 T Th BEN 306 TELLER, M. H.

PS. 208.—Laboratory for PS. 202 and PS. 206. 1 credit.

(Register for one section only.)

Section 111: 12:50-3:50 M W BEN 303 TELLER, M. H.
Section 112: 12:50-3:50 M W BEN 304 TELLER, M. H.
Section 113: 12:50-3:50 T Th BEN 303 TELLER, M. H.
Section 114: 12:50-3:50 T Th BEN 304 TELLER, M. H.

PS. 320.—Modern Physics. 3 credits.
Prerequisite: 1 year college physics, 1 year calculus.
10:30 Daily BEN 209 STAFF

The discovery of the electron, X-rays, and radioactivity; the Bohr theory; photo-electric effect; X-rays and their applications; the nucleus; the neutron, the positron, the meson; high voltage production; nuclear reactions, and atomic energy.

GRADUATE COURSES

PS. 630.—Individual Work. Variable Credit.*
To arrange

Experiments on particular topics of physics, a review of classical experiments, or the development of an assigned experimental problem. The work will be assigned to meet the needs and interests of the particular student.

PS. 699.—Research and Master's Thesis. 0 to 6 credits.*

PS. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

*Credit assigned must be shown on course assignment card.

PLANT PATHOLOGY

Prerequisites to any course in Plant Pathology are Botany 101 and 102. PT. 321 is prerequisite to courses in Plant Pathology except PT. 325, PT. 434, PT. 632, and PT. 634.

PT. 321.—Plant Pathology. 3 credits.
2:00 M W ROL 501
Laboratory: 3:10 M W and 2:00 to 4:10 T Th F ROL 501 OWEN, J. H.

Plant diseases caused by mechanical injury, environmental factors, faulty nutrition, viruses, nematodes, parasitic bacteria, fungi and other plants and their economic importance; life cycles and seasonal development of parasitic fungi and bacteria, and the phenomenon of parasitism; methods of control of plant disease.

PT. 421.—Fungicides. 3 credits.
7:00 M T W Th ROL 409 OWEN, J. H.
Laboratory: 8:10 M W, 7:00 to 9:10 F ROL 409

Fundamental composition, methods of preparation, manner of application and limits of safety of fungicidal sprays, dusts and gasses in relation to disinfection and plant protection.

GRADUATE COURSES

Prerequisites: (1) PT. 321 or equivalent. (2) Thirty semester hours in biological sciences, 15 of which should be in botany.

PT. 605.—History of Plant Pathology. 1 credit.
To arrange ROL 409 MULLER, A. S.

A correlation of recorded historical events and the trends and development of plant pathology as an exploration of our current knowledge of plant diseases.

PT. 606.—Plant Pathology Literature. 1 credit.
To arrange ROL 409 MULLER, A. S.

The knowledge of existing and available source material, current technical publications dealing with plant diseases and their evaluation as aids in conducting research.

PT. 607.—Plant Disease Collection. 2 credits. Prerequisite: PT. 434.
To arrange ROL 409 MULLER, A. S.

The collection, identification, and preservation of plant diseases and fungi, stressing those of economic importance in Florida and those possessing distinctive taxonomic characteristics.

PT. 611.—Diseases of tropical and subtropical plants. 3 credits.
2:00 M ROL 409
Laboratory: M 3:10 and T W Th F 2:00 to 4:10 ROL 409 WEBER, G. F.

Diseases of crop plants growing in tropical America, such as avocado, banana, beans, cacao, citrus, coconut, coffee, corn, cotton, guava, mango, pineapple, potato, sugarcane, tobacco, wheat and others.

PT. 623.—Advanced Plant Pathology. 3 or 6 credits.*
To arrange ROL 501 WEBER, G. F.

A study of life histories of parasitic organisms in relation to the host plant, environmental factors influencing the development of diseases; all diseases of certain crop plants and specific diseases common to a wide variety of hosts.

PT. 699.—Research and Master's Thesis. 0 to 6 credits.*
ROL 408 OWEN, J. H.

For students working for the Master's degree. May be repeated for full credit but credits cannot be used to reduce the total required for the degree.

PT. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
ROL 408 WEBER, G. F.

For students studying for a Doctor's degree. May be repeated for full credit but credits cannot be used to reduce the total required for the degree.
*Credit assigned must be shown on course assignment card.

POLITICAL SCIENCE

PCL. 201.—American Federal Government. 3 hours. 3 credits.
Section 1. 10:30 Daily PEA 201 KANTOR, H. C.
Section 2. 7:00 Daily PEA 202

Basic principles of the Federal Constitution. Political parties and the electoral process. The machinery and functions of the federal government.

PCL. 202.—American State and Local Government. 3 hours. 3 credits.
9:20 Daily PEA 202 BETH, L. P.

State constitutions, political parties, and politics. State legislatures, courts, and chief executives. The functions of state governments. City and county governments.

PCL. 209.—International Relations. 3 hours. 3 credits. Prerequisite: C-1 or equivalent.
8:10 Daily PEA 202 HARTMANN, F. H.

The nature of international relations; nationalism, imperialism, militarism, armaments; history of international relations; foreign policies; functions and problems of democracy; international organization; the United States.

PCL. 400.—Political Science for Teachers. 3 hours. 3 credits.
9:20 Daily PEA 201 WOLFF, G. E.

Special course for Graduate Students in College of Education. Designed for teachers who are in need of: (1) special topics, or (2) certain areas not covered in their general undergraduate work in the social sciences, or (3) additional work in certain fields. May be taken more than once when content is different.

PCL. 508.—Comparative Government. 3 hours. 3 credits. Prerequisite: 6 hours of Political Science.
11:40 Daily PEA 202 WOLFF, G. E.

The government and politics of France, Italy, Germany, and the U.S.S.R. Special emphasis on the historical, cultural, social, and economic determinants of current institutions and policies. Constitutions, parties, legislatures, executives, civil service systems, law, and local government. A comparative analysis of the theory and practice of modern totalitarianism.

PCL. 520.—Political Parties. 3 hours. 3 credits. Prerequisite: 6 hours in Political Science including PCL. 201.
8:10 Daily PEA 201 HAVARD, W. C.

The composition of American political parties. The distinction between political parties and pressure groups; what groups compose our major parties and our minor parties; businessmen, farmers, white-collar employees, wage-earners, and racial and religious groups in politics; an analysis of party and pressure politics in all sections and states of the United States, with particular attention to the South and Florida.

GRADUATE COURSES

PCL. 628.—Seminar in International Relations and Organization. 3 hours. 3 credits.
To arrange HARTMANN, F. H.

An analytical study of the institution and practice of diplomacy; international diplomatic conferences; the League of Nations and the United Nations; public international unions; basic problems of international organization including voting, sanctions, and collective security; world government.

PCL. 630.—Individual Work. 3 hours. 3 credits.
To arrange DIAMANT, A.

A reading or research course in such areas of Political Science as are needed by the graduate students. May be elected for full credit in subsequent sessions with change of content.

PCL. 699.—Research and Master's Thesis. 0 to 6 credits.*
Thesis DIAMANT, A.

PCL. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
Dissertation DIAMANT, A.

*Credit assigned must be shown on course assignment card.

PSYCHOLOGY

PSY. 201.—General Psychology. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily ADM 207 ANDERSON, R. J.
Section 2. 9:20 Daily E 102

The general topics in the field of psychology. Designed to provide an understanding of human behavior, approached as a natural phenomenon subject to scientific study. The unifying concept is the adaptation of the individual to his physical and social environment.

PSY. 202.—Personality Development. 3 credits.
Section 1. 9:20 Daily ADM 207 HINCKLEY, E. D.
Section 2. 11:40 Daily ADM. 207

The mechanisms of personality formation, with special emphasis upon the varieties of human adjustment. The more inevitable problems of human life with their normal and abnormal solutions. The origin and modification of behavior. Processes of motivation and adjustment. Development of personality traits. Techniques of mental hygiene.

PSY. 308.—Developmental Psychology. 3 credits.
10:30 Daily E 102 HORNE, E. P.

An interpretation of research relating to the development of behavior. Consideration of human development is emphasized and augmented by the study of phylogenetic sequences.

PSY. 410.—Abnormal Psychology. 3 credits. Prerequisites: PSY. 201, 202.
8:10 Daily E 102

The principle abnormal phases of behavior, and the ways by means of which the individual develops abnormal habits of thinking and acting. A survey of the signs of beginning maladjustment and procedures which may be followed to correct these tendencies. Special attention is given to the prevention and treatment of mental disease

PSY. 430.—Individual Work. 3 credits. Prerequisites: At least fifteen hours of psychology including PSY. 201, 301, 302, and permission of the Head of the Department.

To arrange

Qualified students and the instructor concerned may choose a particular problem for investigation or study from the various areas of experimental psychology. A formal written report of the work is required of the student.

PSY. 503.—Essentials of Psychological Testing. 3 credits.

12:50 M T W Th ADM 207 RETHLINGSHAFER, D.
Laboratory: 2:00-5:20 T Th ADM 207

Intensive study of theory, principles and methods of measuring mental abilities. Critical analysis of current mental tests with laboratory practice in administration and interpretation.

PSY. 509.—Personality Structure and Organization. 3 credits. Prerequisite: PSY. 410.

10:30 Daily. ADM 207 DIXON, J. C.

Basic concepts and findings, techniques of investigation, and survey of contemporary theories of personality structure and organization.

GRADUATE COURSES

PSY. 601.—Literature in Experimental Psychology. 3 credits.

7:00-10:00 P.M. M W E 102 RETHLINGSHAFER, D.

A consideration of experimental literature in selected areas of psychology.

PSY. 602.—Literature in Experimental Psychology. 3 credits.

8:10 Daily E 107 HORNE, E. P.

The second half of the course PSY. 601-602.

PSY. 630.—Individual Work. 3 credits.

To arrange

A reading or research course in such areas of Psychology as are needed by graduate students. May be elected for full credit in subsequent sessions with change of content.

PSY. 699.—Research and Master's Thesis. 0 to 6 credits.*

To arrange

PSY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

To arrange

*Credit assigned must be shown on course assignment card.

REAL ESTATE

RE. 291.—Real Estate Fundamentals. 3 credits.

(Register for one section only.)
Section 1. 10:30 Daily MAT 108
Section 2. 11:40 Daily MAT 108

A survey of the principles and practices essential to successful ownership of real property. The aim is to develop a full understanding of the significance of realty as a commodity and to equip the student with the fundamentals essential to successful real estate investment and enterprise. Classroom lectures and problems place emphasis on the legal, economic and technical aspects of real estate ownership and provide background training for those seeking specialization in the fields of real estate law, brokerage, management, appraising and real estate finance.

RE. 295.—Housing and Home Ownership. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily MAT 105 TRAVIS, R. W.
Section 2. 9:20 Daily MAT 105 TRAVIS, R. W.

Concerned with the consumption of real estate and the economic, legal and technical aspects of housing from the point of view of the home owner. Stress is laid on the evolution and limitations of property rights, the role of government in the field of housing, principles of home ownership, home construction and design, and the vital problem of when and how to buy a home.

RE. 493.—Real Estate Law. 3 credits.
9:20 Daily MAT 108 CHACE, J. E.

Necessity of learning when to consult a lawyer; fixtures; easements; land descriptions; land titles and interests; deeds; mortgages; foreclosures; landlord and tenant; taxes and assessments; avoidance of "unauthorized practice of law."

GRADUATE COURSES

RE. 699.—Research and Thesis. 0 to 6 hours credit.*
To arrange

Directed research and writing for the master's degree, taken toward the end of the student's graduate program for credit in addition to the 24 hours required for the master's degree.

RE. 799.—Research and Dissertation. 1 to 6 hours credit.*
To arrange

Directed research and writing for the Ph.D. degree, taken toward the end of the student's graduate program for credit in addition to the hours of regular courses required by the candidate's supervisory committee for the doctor's degree.
*Credit assigned must be shown on course assignment card.

REHABILITATION COUNSELING

RC. 641.—Psychological and Sociological Aspects of Rehabilitation Counseling. 3 credits.
8:40 Daily YON 226 BARRETT, A. M.

Study of social and personal problems of the handicapped; psychological aspects of physical and mental disabilities; psychosomatic significance of certain major disabilities.

RC. 642.—Vocational Training and Placement Aspects of Rehabilitation Counseling. 3 credits.
9:40 Daily YON 228 BARRETT, A. M.

Analysis of factors involved in selective job placement and in training facilities for the handicapped.

RC. 644.—Internship in Rehabilitation Counseling. 6 credits. Prerequisite: The basic courses in rehabilitation counseling and permission of instructor.
To arrange YON 102 THOMASON, B.

Supervised practice in counseling, case studies, contacts with community social agencies, as well as practicum in specific rehabilitation processes.

RELIGION

RN. 341.—The Old Testament in the Light of Today. 3 credits.
8:10 Daily I 204 McCOY, C. S.

An inquiry into the literature and history of the Hebrews as reflected in the Bible.

RN. 242.—Survey of Western Religion 3 credits.
9:20 Daily I 204 McCOY, C. S.

A study of the religious ideas of western civilization.

RN. 430.—Individual Work. 3 credits.
I 204 McCOY, C. S.

A tutorial program designed to assist the student in writing a comprehensive essay on a topic which involves the correlation of religion with other areas of knowledge.

SCHOOL ART

SCA. 253.—Introduction to Art Education. 3 credits.
Section 1 2:00- 4:10 M W F I 109 SCHRAEMEYER, C
Section 2 10:30-12:40 M W F I 109 SCHRAEMEYER, C.

General survey and practice in all types of art work. Also open to secondary education majors.

SCA. 333.—Planning the Art Curriculum for Grades One Through Six. 3 credits.
10:30-12:40 M W F YON 28 MITCHELL, J. O.

SCA. 334.—School Art Design. 3 credits.
2:00-4:10 M W F YON 28 MITCHELL, J. O.

To help teachers to understand design in art work of children; crafts and graphics.

SOCIAL STUDIES

SCL. 301.—Social Studies in the Elementary School. 3 credits.
Section 1 9:20 Daily I 207 PEELER, ANNIE LAURIE
Section 2 8:10 Daily I 207 PEELER, ANNIE LAURIE

Study of the selection, organization, planning, developing, and evaluating of experiences which help children become better citizens in a democracy. Exploration of the role of social studies and of other opportunities in the school curriculum for developing needed social learnings. Study of materials.

SCL. 302.—Social Studies in the Elementary School. 3 credits.
10:30 Daily YON 311 NESBITT, M.

Examination of content in the social studies field needed for the instruction of elementary children. Relationship of content in the field to the objectives of the elementary school. Emphasis on problems of in-service teachers.

SOCIOLOGY

SY. 201.—Sociological Foundations of Modern Life. 3 credits. Prerequisite: C-11 or equivalent.
8:10 Daily PEA 308 GRIGSBY, S. E.

Culture and its relations to specific social problems. The social institutions of American life today in relation to population changes, ethnic groups, and major problems of social policy. The social consequences of technological change. Techniques of social control in the metropolitan world.

SY. 321.—Rural Sociology. 3 credits. Prerequisite: SY. 201.
11:40 Daily PEA 308 GRIGSBY, S. E.

American rural life in the changing regions. Trends in rural social resources and problems in the United States, the Southeast, Florida.

SY. 348.—Community Organization. 3 credits. Prerequisite: SY. 201.
10:30 Daily PEA 309 ATCHLEY, M. H.

A study of community structures, activities, problems, and resources. Special attention will be devoted to the problems of community organization in Florida and the Southeast.

SY. 525.—Juvenile Delinquency. 3 credits. Prerequisite: 6 hours of sociology, including SY. 201.
9:20 Daily PEA 309 ATCHLEY, M. H.

Social determinants of delinquency. Methods of detention, probation and parole, court administration. Designed for teachers, social workers, and others concerned with the practical problems of delinquency.

SY. 530.—Individual Work. 3 credits. Prerequisite: 12 hours of sociology, including SY. 201.
To arrange STAFF

Designed to permit advanced students to do work in subjects not available to them in currently offered courses.

GRADUATE COURSES

SY. 625.—Seminar in the Study of Marriage and the Family. 3 credits.
9:20 Daily PEA 301 EHRMANN, W. W.

A critical analysis of the classical systematic treatises and of the more significant research studies in the field. Construction and completion of short research projects by the students.

SY. 630.—Individual Work. 3 credits.
To arrange STAFF

Designed to permit graduate students to do work in subjects not available to them in currently offered courses.

SY. 699.—Research and Master's Thesis. 0 to 6 credits.*

SY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

For students who are working for a doctor's degree in the area of Inter-American Studies.
*Credit assigned must be shown on course assignment card.

SOILS

SLS. 301.—Soils. 3 credits. Prerequisites: CY. 109-110 or CY. 121-122.
9:20 M T W Th McC 133 CALDWELL, R. E.
Laboratory: 12:50 to 3:00 M McC 123

The nature and properties of soils. A treatment of the fundamentals of soil science including genesis, morphology, classification, chemistry, biology, physics and moisture as related to plant growth.

SLS. 302.—Soil Fertility. 3 credits. Prerequisites: SLS. 301.
11:40 M T W Th McC 133 SPINKS, D. O.
Laboratory: 3:10 to 5:20 Th McC 123

General principles of soil fertility. The physical, chemical and biological factors affecting soil fertility and crop production. Studies on samples of soil from the home farm; commercial fertilizers, manures, green manures and organic matter maintenance, crop rotation and permanent soil fertility.

SLS. 406.—Soils and Fertilizers. 3 credits. Prerequisite: SLS. 302.
8:10 M T W Th McC 133 SPINKS, D. O.
Laboratory: 3:10-5:20 T McC 23

The use of commercial fertilizers with reference to their effects on soils, methods of application and crop response. Manufacture and formulation of commercial fertilizers. Laboratory will include a visit to a fertilizer plant where the student will observe commercial practices in mixing and handling.

GRADUATE COURSES

SLS. 600.—Advanced Soils. 3 credits. Prerequisites: SLS. 302 and permission of instructor.
To arrange McC 220

Conferences, lectures, laboratory and problems in Soil Fertility and Management, Soil Chemistry and Microbiology, Soil Physics and Surveying and General Soils.

SLS. 670.—Research in Soils. 1 to 6 credits.*
To arrange McC 220

SLS. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange McC 220

SLS. 799.—Research and Doctoral Dissertation. 1-6 credits.*

*Credit assigned must be shown on course assignment card.

SPANISH

SH. 133.—First-Year Spanish. 3 credits.
8:10 M T W Th AND 18 MORRISON, R. R.
Laboratory: 10:30 Daily AND 11

SH. 134.—First-Year Spanish. 3 credits. Prerequisite: SH. 133 or the equivalent.
9:20 M T W Th AND 6 RAMIREZ, A.
Laboratory: 10:30 Daily AND 11

SH. 201.—Second-Year Spanish. 3 credits. Prerequisite: SH. 134 or the equivalent.
8:10 M T W Th AND 4 WERSHOW, I. R.
Laboratory: 10:30 Daily AND 11

SH. 202.—Second-Year Spanish. 3 credits. Prerequisite: SH. 201 or the equivalent.
9:20 M T W Th AND 4 RAMIREZ, A.
Laboratory: 10:30 Daily AND 11

SH. 430.—Individual Work. 3 credits. Prerequisite: 18 hours of college Spanish or the equivalent and permission of the department head.
To arrange AND 3 WERSHOW, I. R.

GRADUATE COURSES

SH. 630.—Individual Work. 3 credits.
To arrange AND 3 WERSHOW, I. R.

SH. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange AND 3 Staff

*Credit assigned must be shown on course assignment card.

SPEECH

SCH. 200.—Voice and Diction. 2 credits.
2:00 M T W Th ADM 239 McCLELLAN, M.

Effective voice production, clear articulation, acceptable pronunciation, and pleasing intonation; rhythm and phrasing. Both group and individual improvement needs are met.

SCH. 201.—Effective Speaking. 3 credits.
(Register for one section only.)
Section 1. 7:00 Daily ADM 239
Section 2. 8:10 Daily ADM 331
Section 3. 10:30 Daily ADM 239

Designed to aid the student through demonstration and practice to speak effectively to a group.

SCH. 308.—Interpretation of Literature. 3 credits. Prerequisite: SCH. 307.
9:20 Daily ADM 239 ZIMMERMAN, L. L.

Advanced oral interpretation of lyric poetry, dialect readings, novels, plays; arrangement and presentation of public programs.

SCH. 314.—Types of Public Discussion. 3 credits. Prerequisite: SCH. 201.
8:10 Daily ADM 331 EHNINGER, DOUGLAS

Study and practice in the principles and methods of group discussion. Special attention given to problem-solving and conflict resolution.

SCH. 317.—Correction of Speech Defects. 3 credits. Prerequisite: SCH. 201.
10:30 Daily ADM 358 KURTZROCK, G. H.

A beginning course in the recognition of common defects of articulation, dialect, nasality. Observation in the clinic.

SCH. 320.—Speech Training in Elementary Schools. 3 credits. Prerequisite: SCH. 201 or experience as an elementary teacher.
9:20 Daily ADM 358 McCLELLAN, M.

Group procedures for the development of desirable speech habits in the child. Recognition of speech disorders.

SCH. 410.—Scientific Bases of Speech. 3 credits. Prerequisite: SCH. 317.
11:40 Daily ADM 358 TEW, ROY E.

A survey in certain fields of the scientific material which is fundamental to an understanding of the normal speaking process and of speech abnormalities.

GRADUATE COURSES

SCH. 618.—Seminar in Clinical Administration. 3 credits.
8:10 Daily ADM 358 MASE, D. J.

An advanced course in the pathologies of speech, with emphasis on rehabilitative procedures, including the team concept of diagnosis and treatment and other matters pertaining to clinical organization.

SCH. 622.—Clinical Practice. 3 credits. A continuation of SCH. 621.
2:00 to 4:10 Daily ADM 331 BUCK, M. W.

Supervised practice in clinical teaching, application of clinical methods in diagnosis, and retraining of individuals having disorders of speech. Preparation and study of case histories.

SCH. 623.—(Identical with EDP. 506) Problems of the Deaf and Hard-of-Hearing. 3 credits.
12:50 Daily ADM 239 TEW, ROY E.

Designed to train the deaf and the hard-of-hearing. Methods and materials used in meeting the problems of the individual and the group of children or adults who have impaired hearing.

SCH. 630.—Individual Work. 3 credits.
To arrange

A project or research course in such areas of Speech as are needed by graduate students. May be elected in subsequent sessions with change of content.

SCH. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

SCH. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange

*Credit assigned must be shown on course assignment card.

VETERINARY SCIENCE

VY. 545.—Problems in Animal Parasitology. 4 to 8 credits.* Approved for Graduate credit. Prerequisites: BLY. 161, 162, 208, 209, and BCY. 300.
To arrange

GRADUATE COURSE

VY. 643.—Problems in Animal Pathology. 4 to 8 credits.* Prerequisite: Consult major professor.
To arrange

*Credit assigned must be shown on course assignment card.